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ABSTRACT

This study presents the procedures and results of an experiment conducted in Sweden to assess the relative effectiveness of two methods of teaching the grammatical structures of English as a foreign language to adults. The main objective of the study is to find indications as to which of the two theories (the audiolingual habit theory or the cognitive code-learning theory) provides a better basis for teaching foreign language grammar to adults. Chapters examine experimental objectives, existing research, teaching methods, comparative studies, experimental design, evaluation instruments, and project results. Appendixes contain sample instructional materials, charts illustrating distribution of lesson time, evaluation instruments, and information about the Swedish school system. Lists of tables and figures are provided. (RL)

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The GUME/Adults Project

Tibor von Elek and Mats Oskarsson

TEACHING FOREIGN LANGUAGE GRAMMAR TO ADULTS

A Comparative Study

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TEACHING FOREIGN LANGUAGE GRAMMAR TO ADULTS

A COMPARATIVE STUDY

by

Tibor von Elek and Mats Oskarsson

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Gothenburg School of Education
Department of Educational Research

May, 1972

PREFACE

The investigation reported here has been carried out as part of the program of the GUME/Adults Project at the Department of Educational Research of the Gothenburg School of Education. Funds were granted by the National Swedish Board of Education, Bureau L4:1, Stockholm. Financial help has also been obtained from the Committee for Educational Research and Development in the Swedish folk high schools (PUFF), Stockholm. The investigation is one of several that have been undertaken by the GUME research project, which is devoted to research in applied linguistics, particularly foreign language learning and language testing. GUME stands for Göteborg--Undervisningsmetoder i Engelska (Gothenburg--Methods of Teaching English).

The GUME/Adults project is privileged in having Professors Alvar Ellegård, head of the Department of English of the University of Gothenburg, and Karl-Gustaf Stukát, head of the Department of Education of the Gothenburg School of Education, as research advisors, and Lektor Lennart Levin as project coordinator. Mainly as a result of Professor Ellegård's advisorship the project has been in close cooperation with the Department of English of the University of Gothenburg.

The authors' contributions to the thesis are as follows:
Tibor von Elek: Pages 1:1-1:45, 3:2-3:50, 3:65-3:80, 4:39-4:46.
Mats Oskarsson: Pages 2:1-2:26, 3:1-3:2, 3:50-3:61, 4:1-4:38
Pages 3:61-3:64 and 5:1-5:15 were written jointly by the authors.

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We also owe our gratitude to Karl-Gustaf Stukåt for the interest he has taken in our project. Despite the great burden he carries as a researcher, teacher, and administrator, he has always willingly discussed problems concerning the project, and has assisted us with good advice. He has also helped us to procure the necessary funds.

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Our sincere thanks are also due to the administrators of the School for adults, Ragnar Jacobson, Kjell Johansson, and Alf Carlsson, for their courtesy and cooperation in the experiment.

We wish to extend our gratitude to all those who have, in various other ways helped us carry through our investigation. Lisa Örtengren's professional and charming illustrations were a valuable contribution to the instructional materials. The pleasant lay-out and neat typing of the workbooks were skillfully done by Barbro von Elek, who also solved the difficult task of converting our manuscripts into the present form of the report. Kerstin Davidsson has helped us mount the transparencies with meticulous care. Thanks to our English friends, Roy Fox, Valerie Jenkins-Hedén, and David Pring, our tapescripts became stimulating lessons. We would also like to thank Lars Götborg for the high quality of the recordings.

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Gothenburg, April 1972

Tibor von Elek Mats Oskarsson

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CHAPTER 1

INTRODUCTION

1.1 Presentation of the Research

This study presents the procedures and results of an experiment assessing the relative effectiveness of two methods--an implicit and an explicit (henceforth, IM and EX) method--in the teaching of grammatical structures of English as a foreign language to adults. The main objective of the study was to find indications as to which of two theories, the audio-lingual habit theory and the cognitive code-learning theory (Carroll, 1965), underlying the IM and EX methods respectively is the better basis for teaching foreign language grammar to adults.

1.2 Background

The need for an investigation such as the present one must be viewed against three main background factors:

(1) the existence of controversial language learning theories and language teaching methods,

(2) the heated debates on language teaching methods in recent years, and

(3) the expansion of adult education, bringing into focus the particular problems of foreign language acquisition by adults.

In the rest of this section we shall discuss these factors at some length.

1.2.1 Different Theories--Different Methods

It is with good reason that Stern compares "the fascinating parade of methods, reforms, and revolutions" in the history of foreign language teaching to "the rise and fall of hemlines in the fashion journals" (1970, p.5). To varying degrees the changes have been induced by such things as the shift of objectives, dissatisfaction with the results of current methods, and, of course, the constant wish of teachers to improve foreign-language teaching through experimentation with new classroom practices. But it is also a commonly accepted view that "Any fresh development in language teaching is dependent to a large extent on theoretical ideas of language on the one hand and of the language learning process on the other" (Harding, 1967, p.52).

Throughout the ages the changes of method seem to have followed the regular pattern of the swing of a pendulum. "If we now glance back to the development of language teaching method, we see that it first swings from the active oral use of Latin in Ancient and Medieval times to the learning by rule of the Renaissance grammars, back to oral activity with Comenius, back to grammar rules with Plötz, and back again to the primacy of speech in the Direct Method" (Mackey, 1965, p.151). This quotation suggests that language teaching methods can be divided into two major groups according to the attitude they represent toward teaching by rules or teaching by oral activity. If in the teaching process emphasis is placed on rules, the underlying theory can be assumed to be mentalistic; it reflects the view that language use and language learning are largely mental activities involving the ability to reason and to apply rules. On the other hand, methods which attempt to teach the language mainly through active oral practice are likely to be based on the assumption that language is essentially a physical activity which--similarly to many other skills--has to be acquired by imitative and repetitive practice. Such a theory is mechanistic.

This kind of polarization is clearly noticeable in the method battles that have been fought out from time to time by proponents of various methods. Such battles have been numerous and long-lasting. "Vigorous polemic went on in both England and the continent" as early as in the seventeenth century between those who advocate "comparative methods" on the one hand and those who gave primacy to the usage of the foreign language on the other (Kelly, 1971, p.121). The "tug-of-war" between mechanistic and mentalistic language learning theories with concomitant changes in teaching methods has continued throughout the present century. Because of the influx of new ideas and a number of conflicting language teaching principles, there has long been confusion in methodological matters.

There have been many attempts to classify language teaching methods into two main groups according to underlying theories. According to Carroll "Examination of the practices of foreign language teachers and the writing of several theorists suggests that there are two major theories of foreign language learning. One may be called the audio-lingual habit theory, the other, the cognitive code-learning theory" (1965, p.278). Rivers recommends that the representatives of the two major systems of techniques developed on the basis of the two main streams of thought be called the activists and formalists (1968, pp.11-13). A somewhat parallel dichotomy seems to be implied by Titone, who speaks about a functional approach and a formal approach (1968, pp.97-100).

The two teaching strategies employed in our experiment have been elaborated with the expressed aim of reflecting the two opposing theories outlined above. However, they are not to be identified with any particular methods based on the same theories. The main objective of our research, in fact, is not to evaluate certain teaching methods or techniques, but to put the two major theories to the test.

This also explains the use of the terms implicit and explicit, which allude to distinctive features of the experimental strategies, i.e. to the way in which grammar is presented.[1] On the other hand, it is obvious that each of our experimental strategies has a great deal in common with current methods, more or less closely linked with either psychological theory.

The IM and EX methods, as designed for the experiment, will be described in detail in Chapter 3. The present section will be devoted to related methods. Historical surveys of foreign-language teaching methods have been given by many linguists: Hagboldt (1948), Mackey (1965), Titone (1968), Rivers (1968), and Kelly (1969), to mention some of them. A full discussion of the historical development is outside the scope of this study. Therefore, we shall restrict ourselves to analyses of methods that have a direct bearing on our problem: the grammar-translation method, the direct method, and the audiolingual method. Another method, referred to as the modified direct method, will be dealt with mainly because of the particular role it has in language teaching in Sweden. Our main purpose here is not, of course, to cover the entire history of language teaching methods, but to provide a basis for a comparison between these major methods and our experimental ones. Another purpose is to clarify what we mean by the various terms. A term like the "direct method" obviously has different meanings to different people. As was the case in the recent Swedish debate, it is often used to denote methods that are different from what is generally meant by the direct method, for example the natural method, the modified direct method, or the audiolingual method. Such inconsistency in the use of some terms cannot possibly contribute to meaningful communication.

The Grammar-Translation Method

Throughout the eighteenth and nineteenth centuries foreign language teaching in Europe was dominated by what is now known as the grammar-translation method, in some works also referred to as the "grammar method" or "grammatical method". According to Rivers it was characteristic of this method that "class lessons were devoted to the learning of rules and the presumably logical application of these in the construction of artificial sentences in the foreign language, and there was much memorizing of paradigms and lengthy vocabulary lists" (1968, pp.9-10). This description of the activities of a grammar-translation class corresponds well to the memories of a student of Karl Plötz, "the last and most influential representative of the grammar-translation method" (Newmark, 1948, p.5. "Committing words to memory, translating sentences, drilling irregular verbs, later memorizing, repeating and applying grammatical rules with their exceptions--that was and remained our main occupation" (Ibid., p.6).

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[1] Suggested by Professor Ellegård, advisor to the GUME research program, the terms implicit and explicit have been used in a number of comparative method studies conducted by other staff members of the GUME Project. It ought to be mentioned that the methods of the present study differed in several respects from those used in previous studies under the same terms (cf. Related Research, p.2:16). The reasons for using the same terms for non-identical methods were: they were expressive and appropriate for our particular methods, they were free from positive and negative connotations, and they alluded to features that our methods did share with previous ones, i.e. their implicitness and explicitness in the presentation of grammar.

Whether or not such characterizations of the method do justice to what generally went on in the foreign language classroom in the grammar-translation era, may be worth further investigation. However, for the time being, the term is--falsely or correctly--used by the profession in the above described sense, and will be used accordingly in this study, too.

The grammar-translation method was originally the tool of teaching Classical languages, especially Latin. Since these languages did not serve as media for oral communication, the aims of teaching them were to provide students with the ability to read and understand literary works and to train their intellectual power rather than to develop communicative skills. The grammar-translation method, however devoid of a strong theoretical basis it may have been, relied on the assumption that these objectives were best achieved by a deductive teaching process, in which the learning of rules was followed by their logical application in translation exercises. In view of the objectives of the Classical Language programs and of the broader objectives of educating a social and intellectual élite, the grammar-translation method was perhaps not inappropriate.

When modern languages became more common in school curricula, the grammar-translation method was carried over to the teaching of these languages. As the Report of the Committee of Twelve stated, "it was natural that teachers, having no other model to imitate, should adopt the time-honored plan followed in the department of Greek and Latin" (Newmark, 1948, p.281).[1] Growing dissatisfaction with the results of this method when applied to the teaching of modern languages caused a number of teachers to experiment with new, more functional approaches. This trend developed throughout the nineteenth century into a strong reform movement, resulting eventually in new modes of language teaching superseding the grammar-translation method. The Committee of Twelve reported that "while it [the grammar method] is not yet entirely banished from classical instruction, it can scarcely be found, in its original purity, among the modern language courses of any civilized region" (Ibid.).

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[1] The Committee was appointed "(a) To consider the position of the modern languages in secondary education; (b) to examine into and make recommendations upon methods of instruction, the training of teachers, and such other questions connected with the teaching of the modern languages in the secondary schools and the colleges as in the judgement of the committee may require consideration."

The Report of the Committee of Twelve of the Modern Language Association, published by D.C. Heath and Company, Boston, in 1900, contains useful information about, and fairly objective criticism of, several teaching methods current in the nineteenth century. This part of the report, A Critical Review of Methods of Teaching, is reprinted in Newmark (1948, pp.281-291).

However, the grammar-translation method, in various modified forms, has enjoyed periods of revival in many countries. As a result of new linguistic theories in the past decade or so, which will be discussed later in this study (1.2.2), there has been a marked tendency to re-evaluate the role of formal grammar, explanations, and translation, and to consider their value in language teaching less critically than was common in the immediately preceding period. Since just those teaching techniques are commonly associated with the grammar-translation method, this trend has evoked some anxiety in many teachers that we are on our way back toward re-introducing a method of questionable reputation.

The grammar-translation method has been subjected to much criticism ever since the beginning of the nineteenth century. In a summing up of the direct-method movement Buchanan and MacPhee wrote in 1909: "The Reform has fulfilled its mission. It has laid the ghosts of the grammatical method, which made a fetish of the study of grammar with excessive attention to translation from and into the foreign language. Reading formerly served chiefly as a handmaiden to grammar, and was too exclusively limited to historical-literary works. Speaking ability was kept in the background and correct pronunciation was neglected" (in Newmark, 1948, p.9). This characterization can be said to be the gist of the criticism the method has received even from more recent critics. However, the Committee of Twelve found that it had certain undeniable advantages: it trained the mnemonic faculty and provided good exercises in close reasoning. It may be questioned, of course, whether such faculties should be trained by language teaching. Some modern critics, such as Rivers (1968, p.17) and Titone (1968, p.98) suggest that the main "merit" of the method is that it is not demanding on the teacher.

The Direct Method

The definition of this method according to Webster's New International Dictionary reads: "A method of teaching foreign language, especially a modern language, through conversation, discussion, and reading in the language itself without the use of the pupil's language, without translation, and without the study of formal grammar. The first words are taught by pointing to objects or pictures, or by performing actions" (Reprinted in Brooks, 1964, p.269).

A method like this may give the impression that it has been devised with the intention of making it the opposite pole from the grammar-translation method against which it revolted. However, the direct method was the result of many attempts throughout the nineteenth century to provide learners and teachers of modern languages with a more efficient approach than that of the current grammar-translation method. Since it was believed that the grammar-translation method was inadequate for supplying students with the ability to communicate in the foreign language, theorists and teachers tried new ways. Impressed by the ability of children to learn their native tongue and even a foreign language, they observed the ways children acquired language, and devised methods which seemed to duplicate some aspects of this language acquisition process.

The ideas that the living language should be introduced from the beginning of the teaching process, and that the learner should arrive at the laws of the language inductively, were stressed in the early nineteenth century by James Hamilton.[1] Claude Marcel urged the abolition of translation and grammar rules and advocated listening, reading, speaking, and writing as the right order of developing language skills. Gottlieb Heness rediscovered and reinterpreted the "natural method", which he then used in his summer schools. System and order, features entirely lacking in the "natural method", were introduced by Gouin, whose elaborately sequenced and systematized series were greatly inspired by observations on children's questions and behavior in play. He was also one of the pioneers in applying the principles of psychology--association, mental visualisation, learning through activity and the senses--to the process of language teaching, which explains why his method was called the psychological method. By letting his learners act out the sentences of his series, he introduced the important element of physical activity, or dramatization, to language teaching. Another important contribution to language teaching was made by the phoneticians of that time, all of them emphasizing the primacy of speech. It was mainly through Viëtor's efforts that the achievements of phonetics were incorporated in language teaching procedures. Viëtor is probably best known for his militant pamphlet Der Sprachunterricht muss umkehren, published in 1882 under the pseudonym Quousque Tandem, which started a long-lasting debate between adherents and opponents of his "New Method", also referred to at that time as the "phonetic method" or the "reform method". The method advocated by Viëtor reflected, and was the summing up of, the various elements which the reformers of the nineteenth century had contributed to language teaching.

According to Mackey the term "direct method" seems to have been established in 1901 in France, and "By 1902 . . . the méthode directe had become the only officially approved method for the teaching of foreign languages in France. The same year the Direct Method also became official in Germany" (1965, p.146).

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[1] The information in this paragraph is based mainly on Hagboldt (1968) and Mackey (1965, pp.141-151).

It would probably be more appropriate to speak about direct methods than the direct method. In fact, like the Committee of Twelve (Newmark, 1948, pp.282-288), Mackey deals with the "natural method", the "psychological method", and the "phonetic method" separately, although he describes them as similar to the direct method (1965, p.152). However, instead of distinguishing between these predecessors of the direct method, it has become common to use the term in a broader sense, as a collective for all approaches that stress the importance of direct association. "The various 'oral' and 'natural' methods which developed at this time can be grouped together as forms of the direct method, in that they advocated learning by direct association of foreign words and phrases with objects and actions, without the use of the native language by teacher or student" (Rivers, 1968, pp.9-10). In the present study the term will be used in this broader sense.

Even though the writings of the direct methodists are "too polemical to provide us with a coherent theory of language learning" (Harding, 1967, p.52), it seems safe to conclude that basic to this type of language teaching are two assumptions:

(1) second language should be acquired in very much the same way as the first language, and

(2) infants learn their mother tongue, or a second language for that matter, by imitation, repetition, plenty of practice, trial and error, and constant correction by adults.

Most critics object to the first assumption, i.e. the somewhat naive idea that the conditions of first language acquisition could be duplicated at older age levels. We know that the second assumption according to which infants learn their mother tongue in the way described above is vulnerable, too. We shall come back to this issue later (see 1.2.2).

As early as in 1900, evaluating the natural method, the Committee of Twelve claimed in its report that the theory "that a boy or man [sic!] can best learn a new language in the manner in which an infant first acquires its native speech" was false (Newmark, 1948, p.283).

Rivers, too, objects to the unrealistic belief that the conditions of native-language learning could be re-created: "Unlike the infant learner, the student already possesses well-established native-language speech habits" (1968, p.20).

Similarly, in Stern's words "the presence of the first language in the individual as a second language learner is a factor that cannot and must not be ignored. The claim that it should be possible to repeat the first language acquisition process in second language instruction is an illusion" (1970, p.64). From this it follows then that "it is unconvincing to argue that some second language teaching procedures are 'natural' or 'right' on the grounds that they supposedly repeat first language acquisition" (Ibid.).

Since the way of presenting grammar is a particularly important matter to our study, it must be emphasized that in the direct method "Grammar was not taught explicitly and deductively . . . but was learned largely through practice. Students were encouraged to draw their own structural generalizations from what they had been learning by an inductive process" (Rivers, 1968, p.19). Although less relevant to our discussion, it may be a point of interest that "When grammar was taught more systematically, at a later stage, it was taught in the foreign language with the use of foreign-language terminology" (Ibid., pp.19-20). This way of grammar teaching is strongly criticized by Lipsky, according to whom "Direct Method lost its head when it became a cult inspired with a sacred horror of the pupil´s vernacular. The height of absurdity was reached when difficult grammar rules were given in the unknown tongue, and formal introductory text was followed with, '*Konjugieren Sie im Imperfekt*' or '*Deklinieren Sie in der Mehrzahl*'" (1948, p.277).

The superiority of inductive teaching to deductive teaching, so much emphasized by the direct methodists, has been questioned by many theorists and teachers and, since it is one of the major issues of second language teaching, it will be dealt with later in this study.

The more extreme direct methodists dogmatically rejected translation as "a vicious and harmful proceeding" (Palmer, 1968, p.61) as well as explanations and every other use of the native tongue. Thus, as Hammerly points out, the direct method becomes indirect in the sense that "it does not take advantage of a number of time-saving shortcuts available in the *second* language learning process, such as, for example, the ability of the learner to understand and verbalize, in the native language, second language grammatical patterns and semantic relationships" (1971, p.500).

Apart from these aspects the direct method has been criticized because it "could be very discouraging and bewildering for the less talented [student]" and because it "made great demand on the energy of the teacher" (Rivers, 1968, p.21).

This aspect of the direct method is also emphasized by a Swedish scholar: "the direct method is such an extremely difficult and demanding method, that it presupposes a teacher training program which, with respect to its length and intensity, is in the foreseeable future outside the possibilities of this poor country" (Malmberg, 1971, p.57).

Finally, many critics of the direct method share Harding´s opinion that the direct methodists "seem to have missed completely . . . the principle of selection, grading and controlled presentation of linguistic items, first vocabulary and then structures" (1967, p.7).

It is a well-known fact that the popularity of the direct method, having reached its peak around the turn of the century, rapidly decreased. As Buchanan and MacPhee say: "Early adherents of the new method, after their enthusiasm has been dashed by stern realities, have gradually broken away" (in Newmark, 1948, p.9). Abandoning the pure forms of direct method, the teachers started using eclectic methods, or returned to traditional practices. However, the direct method has influenced and still continues to influence language teaching. Stern gives half a page of quotations recommending imitation, repetition, the "natural order", excessive practice, etc. on the grounds that a child learns its native tongue that way (1970, pp.57-58).

The Audiolingual Method

The audiolingual method, also termed "New Key", "scientific method", "fundamental skills method", "aural-oral method", and "American method" has been more or less the official method in the United States for the past three decades and has exerted great influence on language-teaching all over the world. According to Cooper, this method is distinguished by the following features:

> First it places great emphasis on speech, not only as a goal of instruction but also as the medium of instruction. Second, listening (discrimination, comprehension) is taught before speaking, and listening and speaking are taught before reading and writing, when a given item, structure, or pattern is introduced. Third, the use of the student's first language is minimized and translation is discouraged. Fourth, explicit statements by the teacher about the nature of what is being learned are discouraged. Finally, great importance is placed upon mimicry, memorization of prepared dialogues, and repetitive substitution and transformation drills in which patterns are varied in controlled ways. In addition, many (but not all) audiolingual systems attempt to introduce items in a series of carefully controlled, graded materials based upon a systematic analysis of the language to be learned. Where all the students in the class speak the same first language, many audiolingual programs also rely on analyses which contrast the structures of the target language with those of the first language of the students (1970, p.304).

The theoretical bases underlying the method defined above have been elaborated partly by American structural linguists and partly by behaviorist psychologists.

The contributions of the structural linguists to the development of the audiolingual method were many. Word frequency counts like the one made by Thorndike as well as the scientific analyses and descriptions of the various languages resulted in the careful selection and gradation of linguistic materials to be taught, features distinguishing the audiolingual method from both the grammar-translation and the direct method. These linguists also held that speech was primary and writing secondary, which explains the strong emphasis that was put on oral work in the audiolingual method. Moreover, mainly through the research done by Fries, who investigated the speech habits of a large number of people, these scholars adopted the slogan that language should be taught as it was, i.e. as it was spoken by native speakers in ordinary circumstances, not as some people thought it ought to be. The principle of the primacy of the spoken language also explains, to some extent, why advocates of the audiolingual method recommend the so called natural order of skills, i.e. listening-speaking-reading-writing. This sequence of introducing the skills is recommended not only within a class meeting or within the teaching of a certain unit, but also in entire language courses, which means that reading and writing are preceded by a period of entirely audio-lingual teaching. The length of this period varies a great deal depending on the age of the learners, the complexity of the writing system of the target language, and the judgement of the individual teacher or course producer. The principle of postponing the written language is often supported by arguments like those by Hockett: "The human race was speaking for milleniums before writing was invented. Every child learns to speak and understand before he learns to write. Some who learn to speak and understand never learn to read and write" (1959, in Byrne, 1969, p.20).

Since audiolingualists strongly believe and emphasize that the real problems for the learner of a new language are the language patterns that do not parallel those of the native tongue, an important task of the linguist is to analyse and describe the differences between the various languages (cf. Lado, 1961, p.17). Audiolingual courses are, therefore, usually developed in close cooperation with linguists, and rely heavily on the findings of contrastive analyses. The importance attributed to the learning of problem patterns also explains why vocabulary is restricted to a minimum, particularly at the beginning stages of audiolingual courses. "It is these basic patterns that constitute the learner´s task. They require drill, drill, and more drill, and only enough vocabulary to make such drills possible" (Hockett, 1959, in Byrne, 1969, p.22).

The strong belief in the importance of the spoken language is well reflected in slogans and recommendations like the following:

(1) Teach the language, not about the language.

(2) Teach the language, not (at the start) a writing system.

(3) Teach the language, not its vocabulary.

(4) Teach the language as it is, not as anyone thinks it ought to be.

(5) Teach the language as it is spoken in ordinary circumstances, not a special literary or oratorical form.

(6) Teach the language, not its literature.

(7) Teach the language as it is now, not in terms of history.

(Hockett, 1959, reprinted in Byrne, p.19)

What was perhaps still more important for the development of the audiolingual method than the contributions of the linguistic scientists was the behaviorist view of language and the language-learning process, providing strong theoretical foundations for the method. According to this view, whose best-known representatives are Bloomfield and Skinner, language is a set of habits which should be established through a mechanical habit-forming process. In the foreign language classroom this process is to be secured mainly by means of mimicry-memorization and pattern drills, i.e. the manipulation of language structures according to stimulus-response principles. Reinforcement and reward play important parts in this habit-forming process in which the stimulus sentences are so devised as to elicit one possible answer according to the principle that the student learns not through making mistakes but by giving the right answers. When, resulting from these techniques, basic language habits have been established to a high degree of automaticity, language skills are to develop by analogy.

Audiolingualists, contrary to most direct methodists, and especially to adherents of the natural method, are aware that it is impossible to duplicate the process of first language learning, primarily because the second language learner already possesses well-established language habits, whereas the first language learner does not. "It is because we cannot reproduce the situation of mother-tongue learning in all or even most of its aspects when teaching languages to older children or adults that we have a second language problem at all" (Corder, 1966, in Byrne, 1969, p.13). In the teacher's manual of A-LM Russian we find the following statement: "Language teachers . . . have talked too glibly about learning a second language in the same way the first is learned. They have used demonstrations, dramatizations, pantomime, paraphrase, and all kinds of pictures in an effort to avoid using English [i.e. the native tongue]. By excluding English from the classroom . . . it was hoped that its influence would somehow go away . . ." (1963, pp.1-2). The authors of the course hold that "it is not easy to erase whole areas of experience" (Ibid., p.2). Still, behaviorist psychology sees both first and second language learning as habit-forming processes. Therefore, it is inevitable that assumptions on how a child learns his mother tongue are to a large degree reflected in audiolingual practices. Thus imitation and repetition, supposedly playing an important role in the learning of the native tongue, should be employed when establishing foreign language habits as well: "Language-learning, whether by infants or adults, is first of all a matter of imitation" (Stevick, 1955, in Byrne, 1969, p.31). "The matter that is presented, the thousands of morphemes and tagmemes of the foreign language, can be mastered only by constant repetition. . . . Every form that is introduced should be repeated many times" (Bloomfield, 1933, p.505). It is these assumptions that justify the large proportion of time devoted to dialogue memorization and repetition drills in audiolingual courses.

One of the major difficulties in foreign language learning that has to be overcome is interference from the native language. Therefore, mere imitation and repetition are not sufficient to achieve mastery of a foreign language: one has to counteract the influence from native language habits if these are not to be reflected in the learner´s foreign language usage. Once the descriptive linguist assisting the audiolingual course producer has pointed out the major structural differences between the native and the target language, course materials and the teaching process have to concentrate on these contrasting patterns. But analysing these differences, talking about them, will be of little help to the student, according to the audiolingualist. His belief is that "controlled practice of carefully structured drills is a more meaningful way to learn the grammar than reading or hearing about the grammar system . . ." (Dawson, 1964, p.12). These drills, especially substitution and translation drills, forming the backbone of an audiolingual course, will help the learner neutralize interference from his native tongue, establish new habits, and develop the function of analogy. "Since as children we learn the mother tongue quite by analogy and not by analysis, why should we not try to make analogy work for us in the learning of a second language? This is the secret and the guiding principle of pattern practice or structure drill" (Brooks, 1964, pp.152-153). The importance assigned to the pattern drill is shown in such recommendations as the one we can find in a pamphlet supplying teachers with Do´s and Don´t´s of audiolingual teaching: "Some kind of intensive drilling should occupy at least 80 per cent of each class period" (Quilter, 1966, § 76).

These ideas explain why proponents of the audiolingual method are so restrictive in giving grammatical explanations. "To a considerable extent, time spent learning about the language is time that might better be spent in acquiring facility in the language" (Hockett, 1959, in Byrne, 1969, p.19).

Language learning by a method using such strategies as imitative and repetitive practice, memorization, and drill "is not an intellectual task" (Ibid.). This is readily admitted by many proponents of the audiolingual method. In the Instructor´s Manual of Modern Russian we learn that the fundamental principle guiding the preparation of the course was that "a foreign language is learned not so much by intellectual effort and analysis as by intensive practice" (Dawson, 1964, p.2). In the same source we are told that traditional exercises, "heavy with fill-in-items, which must either be translated from one language to the other or changed into a different form from the one cued . . . tend to be intellectual exercises which are far removed from real language usage and do little to develop control of language patterns" (Ibid., p.12), and Hockett claims that "to introduce various bits of 'intellectual content' into an elementary language course is, in general, to fritter away time that should be devoted to the task of teaching and learning the language" (1959, in Byrne, 1969, p.21).

We are aware that our presentation of the essential features of the audiolingual method can be neither complete nor entirely correct, since it is not possible for us to take into consideration all the existing varieties and discrepancies due to the large number of contributors to the theory and practices of the method and to the relatively long period of its existence. Careful study of the writings of audiolingual theorists as well as of various audiolingual courses show large variations as far as types of pattern drills, explanations, and attitude toward the use of the native language are concerned. As an illustrative example we can mention the A-LM Russian course, which is based on the principle that one ought to make "intelligent use of the learner´s native language" (1963, p.2), which is quite different from some of the more dogmatic quotations above. Although most courses make use of a variety of types of drills, usually moving from manipulative exercises toward communicative ones, we find those who claim that pattern practice "makes no pretence of being communication" (Brooks, 1964, p.154) and those who emphasize the importance of using communicative, situational, or contextual drills.

A number of circumstances had stimulating effects on the rapid expansion and growing popularity of the audiolingual method in the United States after World War II. During the war a sudden need for fluent speakers of various languages emerged in America (cf. Grittner, 1969a, pp.17-21). This need was met by converting a number of young Americans into bilinguals in a surprisingly short time by what went down in the history of language teaching as the "Army Method". The impressive results achieved in these Army Specialized Training Programs, assisted by the American Council of Learned Societies, may have been due to the type of learners, constituting a group of highly motivated individuals selected according to intelligence and language aptitude, and to the almost unlimited economic resources that could be used to create ideal teaching conditions, such as instruction in small groups, a large number of classroom hours, native speaker assistants, etc. Since such conditions could not possibly be reproduced in ordinary school settings, the Army Method could not serve as a model for high school and college courses. Still, it exercised a good deal of influence upon language teaching since it proved the feasibility of developing high degrees of skill and fluency in a foreign language. The Army Schools made it possible to adapt the principles of language teaching elaborated by structural linguists and psychologists in the 1920s and 1930s. According to Grittner it was two aspects of the Army Method that were to have an important influence in shaping the American Method, "the new linguistic analysis and the view of grammar as habit formation" (1969, p.20).

Advances in electronics resulting in the invention of the magnetic tape and the language laboratory, were further important factors contributing to the spread of the speech-oriented audiolingual method.

The first Russian Sputnik is by many considered as a turning point in American education. Its indirect effect on language teaching affairs in the United States can be measured by the spectacular increase in the number of language laboratories, teacher training and retraining programs, and new course materials, made possible through generous federal funds from 1957 onwards. The foreign language teaching field in the United States enjoyed a period of "unparalleled expansion and support" (Jakobovits, 1971, p.71). Gains in enrolments in foreign language courses were both a cause and effect of this "Golden Age" of foreign language learning, but they also reflected a clear shift in attitude toward the world beyond the boundaries of the country. In an era of increasing desire to be able to communicate in a foreign language the audiolingual method was bound to be given favorable reception.

The Direct Method and the Audiolingual Method Compared

Descriptions of the three major language-teaching methods presented above imply that there are few similarities between the grammar-translation method on the one hand, and the direct and audiolingual methods on the other, as far as their typical instructional techniques are concerned. A comparison of the two latter methods, however, seems to be justified because of the tendency--especially outside the United States--of confusing the two methods. It is not surprising that owing to a number of distinctive features shared by the direct method and the audiolingual method, such as emphasis placed upon the active use of language, restrictive attitude toward the use of the native tongue and formal grammar, and the belief in the superiority of learning by induction, cause not only laymen but also people actively involved in the language teaching profession to confuse these methods. Some important differences must, therefore, be pointed out:

(1) Audiolingual courses teach carefully selected and graded materials based on contrastive analyses of the native and the target languages, while in the direct method grammar and vocabulary occur more randomly. Direct method materials are sequenced and arranged not so much with regard to linguistic features as to logical and topical coherence.

(2) Audiolingualists do not object to the use of the native language whenever it facilitates the quick clarification of a concept. Direct methodists make great effort in teaching through complete isolation of the native tongue, and in replacing it by whatever other way is possible to convey meaning, in order to achieve direct association.

(3) Audiolingual courses include concise and simple grammatical explanations, so called generalizations, in the native language, whereas in the direct method grammar--if discussed at all--is dealt with in the target language.

The terms direct method and audiolingual method will be used in our study with the above described differences in mind.

Eclecticism

It seems safe to state that only a minority of foreign language teachers use pure forms of the three major language teaching methods presented and compared in the preceding sections. The majority are likely to belong to the family of eclectics making use of the elements of more than one method in their own teaching work. Until more is known about the language acquisition process in the various types of learners, and consequently about the most appropriate teaching strategies to be used at the various proficiency, ability, and age levels, eclecticism seems to be more reasonable to recommend to teachers than adherence to one particular method or another.

One of the best-known eclectics who has educated generations of language teachers and still continues to influence present-day teachers through his works is H.E. Palmer. Although he declared that language teaching should be a process of forming habits and stressed the primacy of structure learning, he reacted against the excesses of the direct method. For example, he saw formal grammar as "a useful crutch with which to order knowledge already gained by active methods" (Kelly, 1971, p.123) and regarded the total rejection of translation as the fallacy of the direct method, declaring that "The exclusion of translation as a regular means of conveying the meaning of units is an uneconomical and unnatural principle" (Palmer, 1968, p.60).

Another well-known figure of the language teaching profession of more recent years, Wilga M. Rivers, characterizes the "true eclecticist" in so favorable terms that there can be hardly any doubt of her own "middle-of-the-road" position: "The true eclecticist . . . adapts his method to the changing objectives of the day and to the types of students who pass through his classes, gradually evolving a method which suits his personality as a teacher. The best type of eclectic teacher is imaginative, energetic, and willing to experiment. As a result his lessons are varied and interesting" (1968, pp.21-22).

An eclectic position on a specific, oft-discussed issue is expressed in an article by Barrutia, discussing the advantages and disadvantages of induction and deduction. He contrasts the possible effect of giving the grammar rule after the drill with that of the opposite strategy. The danger of waiting with the rule until the end of the drill is that "we will have lost the benefit of a focal point while the drill was in progress" whereas "if we give the rule first, we immediately deprive many students of the values of discovering the structure for themselves" (1966, pp.159-160). As a solution to this problem he suggests presenting the drill first without explanation, then asking a student to describe what is taking place grammatically, followed by the teacher giving the rule in a more concise generalization, and finally continuing the drill (Ibid., p.163). A similar compromise is recommended in Do´s and Don´t´s of Audio-Lingual Teaching on the grounds that "The question of whether grammatical concepts should be introduced inductively or deductively is not as easy to resolve as many methodologists suppose" (Quilter, 1966, § 26). It is very likely that the same procedure is being practised--independently of Barrutia´s article and Quilter´s recommendations--by a large number of teachers just using their common sense.

Even though one may find a compromising attitude preferable to dogmatic intolerance, the views of the preachers of eclecticism must not be left unchallenged. It is difficult to agree with a statement like this: "There are many methods and techniques in language teaching. The good teacher uses all of them /sic!/ at different times, not only to lend variety to his teaching, but also in the hope that one of them will give students insight into the item or pattern being taught. Pupils have different learning modes just as teachers have different teaching styles" (Finocchiaro, 1969, p.449). Attempts at using the whole repertoire of language teaching to ensure learning by all students would not only be doomed to failure because of the time factor, but would also be theoretically objectionable, and pedagogically undesirable. Surely, no one teacher would find it compatible to use grammar-translation and direct method techniques alternately. Finocchiaro´s advice arouses the suspicion that eclecticism is not always the result of the teacher´s conscious efforts to vary his teaching strategies; it may very well be the consequence of uncertainty as to what strategy would be the appropriate one in a given situation.

Because in the teaching of languages we have no access to reliable prescriptions as to how much cognition and how much habit formation might prove the right treatment in a certain teaching situation, and because the teacher´s common sense is no guarantee that he will produce the most effective blend of teaching techniques to achieve given objectives, eclecticism cannot be regarded as a terminal solution. It is one of the major tasks of the applied linguist to assist his practitioner colleagues by finding empirical evidence as to the efficiency of various techniques in various teaching situations, and through these findings gain new insights into the process of language acquisition.

After quoting a statement according to which both the behaviorist and the mentalist positions are advantageous to language teaching, Bolinger remarks that "This attitude is not likely to appeal to the intellectual esthete for whom eclecticism is a disgustingly uncommitted philosophy" (1968, p.41). Even if we, as language teachers, do not have to identify ourselves with the "intellectual esthete" we have to take into consideration that we are likely to meet, even on the part of language teachers, with such uncompromising views as are expressed in the following criticism of the eclectic method by an adherent of Gestalt psychology: "'Eclectic' is the war-cry of the philosophically bankrupt who have nothing of their own, but struggle to exist by borrowing a little here and there as need arises - perhaps the only thing to do in a period of hopeless destitution; . . ." (Lipsky, 1932, in Newmark, 1948, p.277).

The Modified Direct Method

Modified direct methods have probably existed as long as the direct method itself, since it is very likely that teachers who adopted ideas and techniques advanced by the direct methodists used them in combination with others. Therefore, methods deserving the term "modified direct method" must have existed in plenty.

In the present study, however, the term will be used with reference to a method which, we believe, corresponds to the intentions expressed in the Authorized Swedish Central Curriculum as to the teaching modes to be used in the comprehensive school.[1] The reason for terming the recommendations of the Curriculum the modified direct method is that, whereas it does not propagate any specific, clearly defined method, its recommendations can be said to amount to a way of teaching which is often referred to as the modified direct method by Swedish methodologists, e.g. Hensjö (1966, p.4). It is true that in his book Hensjö refers to the Curriculum published in 1962 (Läroplan för grundskolan, 1962), but the differences between the two concern details rather than the general approach. Lgr 69 is distinguished from its predecessor by more prescriptive wording on some points as well as by being more restrictive regarding grammatical explanations (cf. Edwardsson, 1970, p.24).

Lgr 69 will be quoted extensively in Chapter 3 where the experimental methods will be described and related to other methods. In the passage below we shall attempt to give a concise presentation of the method reflecting the spirit of the Curriculum. Since the wording of Lgr 69 is, on the whole, non-categoric and allows considerable freedom, our presentation must necessarily be the result of subjective judgements even though we have been anxious to give the Curriculum an unbiased interpretation.

The modified direct method has a great deal in common with the audiolingual method: it gives priority to the teaching of audiolingual skills, recommends the "natural order", and encourages grammar teaching by means of carefully structured pattern drills which are not only to establish automatic habits, but are also supposed to lead the pupils toward insight into the structure of language. It differs from most audiolingual courses in that it opposes purely mechanical practice in favor of meaningful exercises. It does not insist on dialogue memorization, the most important feature of the audiolingual method next to pattern drill. Another common audiolingual practice, i.e. the offering of grammatical generalizations after drills, does not occur in Lgr 69 as an overt recommendation, although this procedure is not condemned. In this respect the Curriculum tends to approach the direct method, which is also the case with respect to its restrictive attitude toward the use of the native language to convey meaning. The Curriculum favors direct association by means of paraphrase, actions, gestures, pictures, etc.

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[1] The Curriculum, Läroplan för grundskolan (1969), and the accompanying volume containing supplementary comments on the teaching of English, Lgr 69, Supplement Engelska, will henceforth be referred to as Lgr 69, and page-numbers will refer to the supplementary volume.

In summary we venture the conclusion that the modified direct method as recommended by Lgr 69 is a compromise between the direct method and the audiolingual method. Since the theoretical bases or assumptions of the methodological recommendations of Lgr 69 are not stated anywhere, the foundations have to be estimated by contemplating the edifice. On these grounds there can be no doubt that the proper place of the modified direct method is among those based on the audio-lingual habit theory. It is true that Lgr 69 emphasizes the importance of insight into the structure of the target language, but this insight is to be achieved implicitly, by means of habit-forming procedures.

1.2.2 Methodological Discussions

As was pointed out at the beginning of this chapter, methodological debates have been common in the language teaching profession. One of the reasons for this is probably the difficulty in evaluating empirically the results of the various teaching procedures. Therefore the superiority of one method as compared with others is largely a matter of faith, and unless we can develop better measures for the evaluation of our efforts as teachers, polemics around methods--for better or worse--are likely to continue to characterize the profession, especially at times when new theories, approaches, or technical devices.

Probably the best known methodological debate involving international participation was the one between the proponents of the various direct methods and the traditional school before and around the turn of the century. The effects of that debate have been dealt with before. In this section we shall devote ourselves to the discussions around the audiolingual method during the last decade or so, and to the methodological debate in Sweden in recent years which, in many respects, can be seen as a small-scale equivalent of the former, although in the Swedish debate the discussion was often centered around specific problems, due to language teaching conditions in this country.

Criticism of the Audiolingual Method

In the 1960s the position of the audiolingual method was affected by forces operating in opposite directions: its steady advance during the post-war years became still more pronounced owing to the dissemination of such powerful audiolingual courses as the A-LM (Audio-Lingual Materials) and the "Modern" series published in rapid succession in the early 1960s, at the same time as there was increasing criticism of, and dissatisfaction with, the method both on theoretical and empirical grounds. A considerable proportion of the literature of the profession during the past decade has been centered around audiolingual language teaching. This flow of argumentation has brought about a permanent debate with a growing group of critics on the offensive and the adherents of the method on the defensive, with occasional attempts from a third group to mediate between the two sides. In the present section an attempt will be made to survey the points of criticism challenging the justification of various audiolingual practices and their underlying theoretical bases.

In this survey we shall first investigate the arguments directed against the theoretical basis underlying the method. As Carroll says: "The audio-lingual habit theory which is so prevalent in American foreign language teaching was, perhaps, fifteen years ago in step with the state of psychological thinking of that time, but it is no longer abreast of recent developments. It is ripe for major revision, particularly in the direction of joining with it some of the better elements of the cognitive code-learning theory" (1965, p.281).

One of the major tenets of the audiolingual habit theory--the view that language is a system of habits--has been challenged on the basis of new theories of language and language learning.

The shift in the view of the nature of language can be characterized --in a much simplified manner--in Stern's words: "Psycholinguistics of the fifties seemed to say: Look at behavior anywhere in biological organisms and you will know what language is like. In the sixties, largely as a result of the work of Chomsky, Lenneberg, and Miller, we have increasingly come to say: Look at language and it will tell you a lot about the human mind" (1970, p.50).

To be somewhat more specific we may add that in the behaviorist forties and fifties it was common to view language in the same way as any other behavior, even that of a primitive organism. A

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[1] A-LM (Audio-Lingual Materials), a four-level secondary-school program of text and audio materials in several modern languages, published by Harcourt, Brace & World.

Modern Spanish, Modern Russian, etc. Two-level courses developed according to audio-lingual principles, published by Harcourt, Brace & World.

See also bibliography: A-LM (1961 and 1963) and Dawson (1964).

rat running a maze or a human using language were considered as fundamentally identical behaviors differing in degree rather than in kind. Language acquisition was viewed as a "learned achievement" dependent on environmental stimuli, in which trial-and-error, reinforcement, and the formation of new associations played important roles.

In his review of Skinner's Verbal Behavior, published in 1959, Chomsky challenged the behaviorist position in the psychology of language, offering at the same time a new outlook on language behavior and language acquisition. This and subsequent works by Chomsky and works by Lenneberg have resulted in a reorientation of linguistic theory that has greatly contributed to a new and critical attitude toward the audiolingual method.

Chomsky finds it impossible to accept the view that linguistic behavior is a matter of habit. "Language is not a 'habit structure'. Ordinary linguistic behavior characteristically involves innovation, formation of new sentences and new patterns in accordance with rules of great abstractness and intricacy" (1966, p.153). This principle of "creativity" in language use is one of the basic aspects distinguishing the new theory from the habit-theory. In addition, Chomsky and his followers differ fundamentally from the behaviorists in that they emphasize that language is a uniquely human activity. Moreover, while the structuralists stress the uniqueness of each language and describe the differences between various languages on the basis of laborious and careful contrastive analyses, the transformationalists look for language universals, maintaining that all languages have some important features in common.

Research on first language acquisition has lent considerable support to Chomsky's theory. Several writers stress that children do not acquire their mother tongue by being "taught" it. Indeed, it would be difficult to prevent them from learning the language when exposed to it in a natural environment. Lenneberg, for instance, while not disregarding the roles of learning and environment, draws attention to phenomena suggesting that language develops even under very unfavorable conditions. Observations on the congenitally deaf have shown that they learn the intricacies of language and learn to communicate efficiently through writing. Another example of man's preparedness for speech is that "organic muteness in the presence of good hearing is no hindrance for the development of . . . speech communication" (Lenneberg, 1964, p.589). Attention has also been drawn to the rather uniform pattern of the biological time-table for some important stages in language development. "Language unfolds lawfully and in regular stages" Lenneberg claims (1967, p.326). There is also evidence that a child seldom repeats or imitates sentences uttered by adults if these sentences contain structures that are not part of the child's own grammar. In these cases the child transforms the sentences according to his own grammatical framework.

The radical shift in language acquisition theories may be demonstrated by quoting Jakobovits, according to whom "Imitation, practice, reinforcement, and generalization are no longer considered theoretically productive conceptions in language acquisition" (1971, p.24). If we reject the theory that language is acquired by these processes, we must try to find something else to account for language development. In his article "The Capacity for Language Acquisition" Lenneberg demonstrates "the logical possibility -if not probability" of the notion that "man may be equipped with highly specialized biological propensities that favor and, indeed, shape the development of speech in the child and the roots of language may be as deeply grounded in our natural constitution as, for instance, our predisposition to use our hands" (1964, p.579).

If language development is so regular in spite of large differences in cultural and environmental conditions, and if man communicates everywhere in a strikingly similar pattern, as Lenneberg says (Ibid., p.586), we have to postulate a language acquisition device in the child on the one hand, and we have to accept the notion of linguistic universals at the deep structure level on the other. The child's innate language acquisition device seems to become less and less available as the child grows older. This would explain why the child gradually loses his capacity to acquire a language in a "natural" way, i.e. from mere exposure to it. Puberty seems to represent a critical period in a human being even with respect to the gradual change of this language learning capacity. Lenneberg deals extensively with this "critical period" in his Biological Foundations of Language (1967, pp.142 ff.). He demonstrates the milestone character of puberty with two findings: firstly, the chances of recovery from acquired aphasia rapidly deteriorate after the early teens, and secondly, the acquisition of primary language in the mentally retarded may go on until puberty, but progress stops after this period.

The question arises as to what the implications of the new theory are for the learning of foreign languages. Chomsky himself says that he is "rather sceptical about the significance, for the teaching of languages, of such insights and understanding as have been attained in linguistics and psychology" (1966, p.152-153). It has also been maintained that whatever our knowledge or assumptions of first language acquisition, they are not automatically applicable to second language learning.

However, the new theory has at least two implications for foreign language learning and teaching:

(1) If a human being's ability to learn a language in the "natural" way gradually decreases with maturation, the learning of a foreign language should become an increasingly artificial process depending largely on the age of the learner. This process has to be shaped with regard to capacities and referential frameworks that develop with the maturation of humans.

(2) If we reject the theory of language as a habit structure, we have to question the justification for such techniques whose application has been motivated by the habit theory.

> Though these techniques--primarily the oral structure drills--should not be abandoned unquestionedly, their effectiveness at the various age levels has to be put to serious test.

Since the pattern drill technique is regarded as the most potential technique of the audiolingual method, it is not surprising that its opponents have concentrated their attacks on this feature of the method.

The pattern drill technique has been criticized mainly for having the following deficiencies: there is little transfer from drill exercises, especially mechanical ones, to real life situations; pattern drills focus on surface features without reaching the deeper levels of grammar; they are often dull and monotonous, which must have an unfavorable effect on student motivation and attitude; they do not give students the feeling of doing meaningful work; and they are time-consuming, depriving the students of time for other types of practice.

In an article devoted mainly to pattern drill, Frey (1968) finds that "it can easily lead to classroom monotony and thus negate much of its potential function" (p.354) but thinks that its most serious limitation is the fact that it does not represent speech or communication. According to Belasco (1965) "not many students can understand and speak the language outside the ordinary classroom situation" despite the ease with which they perform in the manipulation of drills (p.483). Gefen (1967) is of a similar opinion: "the learner may utter the pattern perfectly . . . yet not understand a word." He concludes that these learners "will suffer from the same faults as do the traditionalists: knowing the patterns (where the traditionalists know the paradigms) but not knowing the language" (p.192). Newmark and Reibel (1968) find that "structural drills, in which the student practises switching quickly from utterance appropriate for one situation to another utterance appropriate for quite another situation, are ineffective in principle" (p.151).

We could go on quoting similar critical statements on the pattern drill. However, it must not be overlooked that a good many linguists have pleaded in defence of this technique. Bolinger (1968) thinks that "We have to return to the lowly origin of drills, which was in the humble setting of the classroom, before anybody thought of dressing them up in behaviorist philosophy. We have pragmatic reasons for retaining them, and retain them we should. This says nothing of the limitless need for improving them" (p.40).

It should also be stressed that even those criticizing the pattern drill hardly ever suggest that we should wholly abandon this type of exercise. On the contrary, the majority find drills justified particularly in the field of phonology and surface structures of grammar, at the same time as they repeatedly suggest that we should find ways of devising better drills. In his article referred to above, Frey points out a number of shortcomings in conducting pattern drills and gives teachers advice on how to improve them. The articles by Newmark and Reibel and by Wolfe, which will be referred to in the next section, contain some suggestions on improving pattern drills, too.

Criticism of the audiolingual method has not been based merely on theoretical considerations. According to Jakobovits the success of foreign language curricula in American schools has remained extremely limited in spite of the major breakthrough in the technology of foreign language teaching achieved in the last twenty years. "Serious dissatisfaction with it is being expressed at all levels by teachers, students, and parents despite the fact that strong social forces remain in this country for the maintenance of an interest in FL´s and foreign cultures. Being bombarded by criticism from both external and internal sources, the FL teaching field now finds itself on the defensive after enjoying two decades of unparalleled expansion and support" (1970, p.71).

The rather discouraging situation of foreign language teaching presented by Jakobovits must be seen as the result of the specific conditions of foreign language teaching in the United States, not necessarily paralleled by conditions in other countries. In a following section we shall attempt to give an insight into current problems in foreign language teaching in Sweden.

In this section we have concentrated on the arguments raised primarily by debaters taking the anti-audiolingual position. The position of the audiolingualists was presented in a previous section. Our one-sided presentation of the debate must not be interpreted as if the "establishment" had limited itself to passive resistance. As Jakobovits says: "Attacks on the audiolingual method . . . have generated heated counterattacks on the part of devotees who have committed a life time to the method and feel that without 'definitive proof' it should not be abandoned" (Ibid., p.26).

It would be unfair, however, not to mention the appreciation shown for the achievements of audiolingualism during the last decades of its dominance. Even Jakobovits admits in his otherwise very critical article about the audiolingual method that "At the time it became entrenched in the profession, it did seem to be the best possible strategy, and the proponents deserve credit for the forthrightness and purity with which the approach was developed and applied" (Ibid.). The changes and improvements brought about by the audiolingual method are recognized by Stern in the following words: "Languages have become more accessible to a large number of people. There has been a marked shift toward learning the spoken language, such that the complaint of the past that you learn anything in a foreign language class except how to speak and understand the language is far less justified. Thanks to ingenious new approaches, sometimes aided by clever technological devices, language teaching at its best is more vivid, more useful, and a more significant personal experience. . . . There is a great deal of pedagogical skill and ingenuity in present-day language courses" (1970, pp.6-7).

Wardaugh, too, is of the opinion that "many useful contributions to linguistic research and language teaching have been made by those linguists, psychologists, and teachers who have stressed the habitual aspects of language function" (1967, p.23). He is referring to contrastive studies, gradation, courses which emphasize teaching the language rather than teaching about the language, and good introductory courses, as such contributions.

The recognition of some beneficial effects of the audiolingual method coupled with the awareness that no clearly outlined alternative has as yet been offered to replace it, have caused linguists, methodologists, and teachers to look with anxiety at recent developments. Hawley, for instance, while admitting that a reaction against the extremes of the audiolingual method is not only inevitable but also desirable, finds a danger inherent in it: "The danger is that the pendulum may now be carried to the other extreme . . . rather than stopping in the middle" (1964, p.19). Similarly, Jakobovits expresses a certain fear that "now that audiolingualism is on the defensive . . . the pendulum might be allowed to swing back too far so that we lose sight of the vastly superior instructional technology which we now have at our disposal but was nonexistent in the earlier dark ages of FL teaching" (1970, p.72). Jakobovits' subsequent recommendation that "we must strive to reach a correct balance . . ." (Ibid.) is another example indicating that few linguists want to return to the pre-audiolingual state of language-teaching affairs. The reasons for recommendations to take a stand somewhere in the middle may be many: awareness that the process of acquiring a language has both habit-forming and cognitive aspects; that techniques emerging from opposing theories are not necessarily mutually exclusive; that a balanced way of teaching is exactly what the majority of teachers practise with success; that we know too little about the language learning process to be more specific in our recommendations as to teaching methods.

Such vague eclecticism, however, is not satisfactory as a final solution. Experimental research has to be carried out both in order to get a better insight into the process of second language acquisition and to assess the value of the various teaching procedures at the different age, proficiency, and aptitude levels. "Second language teaching procedures, from whatever source they are derived, must pass the pragmatic test: how successful are they in teaching a second language?" (Stern, 1970, p.64).

The Methodological Debate in Sweden

The recent Swedish debate on language teaching problems was in several respects a small-scale counterpart of the discussion about the theory and practices of the audiolingual method of the past decade described in the preceding section. Obviously, the debate did not follow theoretical lines only, but was constantly linked up with the current practical problems facing representatives of the foreign language teaching profession in Sweden.

To understand part of the background to the debate, the reader not familiar with Swedish conditions ought to be given some information about developments in language teaching in this country (see also Appendix 4).

Before the 1962 school reform, foreign language teaching played a modest role in primary education; not until 1956 did English become a compulsory subject at this level throughout the whole country (Orring, 1967, p.18). It was the various selective-entry secondary schools that represented the given place for second language instruction. In those schools the final examination papers consisted of translation tasks, which inevitably had a steering effect on the activities in the foreign language classroom. As far as generalization is justified and possible, it can be stated that prior to the school reform foreign language teaching in Sweden was largely characterized by formal grammar and two-way translation.

The 1962 school reform introduced a new system of compulsory education with a rather extensive foreign language program offering courses in English as a compulsory subject, and in German and French on an optional basis (see Appendix 4). The objectives as well as the methodological recommendations were laid down in the 1962 Official Curriculum. The type of approach recommended was described in a previous section entitled Modified Direct Method. The new--or rather modified--version of the Curriculum, issued in 1969, could be characterized as having a more extreme position and a more dogmatic wording in favor of direct method practices.

Prior to the 1969-70 debate, methodological problems were presented in sporadic articles, occasionally resulting in a few exchanges of arguments in subsequent issues of pedagogical journals, without, however, causing great involvement.

The translation method was declared inferior to unilingual teaching on all essential points by Hjelmström in 1959. In his article entitled "Ut med översättningen" ("Down with translation") he argued in favor of the total exclusion of the mother tongue, questioning the justification of translation both in exercises and in examination papers. Gjötterberg (1959) met Hjelmström's arguments on theoretical grounds, while Kruckenberg (1959) drew attention to the practical problems of using a direct method, such as the great demand it places upon the teacher and upon mediocre and poor students, the large class units, and the inadequate qualifications of the average teacher for coping with such a method.

In an article entitled "Educators or Drill-Sergeants" B.Holmberg (1965) criticized the "dogmatic advocates of the direct method" (p.2) for categorically rejecting translation and denouncing practically every kind of linguistic analysis. Finding it "wholly unacceptable that the study of language should be totally de-intellectualized" he argued for providing pupils "not only with linguistic skills but also with some insight into language as such" (p.3) and for "a reasonable amount of methodological eclecticism" (p.4).

The role of translation was taken up anew by O. Berggren (1966). Presenting common arguments for and against translation, he concluded that the usefulness of translation has to be assessed through investigation and experiment.

The first overt challenge to the method corresponding to the recommendations of the Official Curriculum came from Professor Alvar Ellegård, head of the Department of English of Gothenburg University. In an article (1967) he gave an account of the linguistic theory developed by Chomsky and his associates, implying that if this theory were correct, the theoretical grounds of the direct method were largely invalidated. Although he did not propagate for the rejection of the direct method, he suggested that the role of imitation and repetition might be overemphasized, conscious grammatical knowledge might prove more efficient than unconscious drilling, and comparisons between the target language and the mother tongue might be a help rather than a hindrance in the foreign-language learning process. These, then, were some of the urgent problems that had to be investigated. In view of the large investment in foreign language teaching in this country he found it imperative that extensive research be undertaken.

Although this challenge to the direct method was taken up by Åke Andersson of the National Swedish Board of Education, and arguments were exchanged on some aspects of the direct method, such as the formation of associations and analogy, no very extensive debate followed.[1]

Two years later, Ellegård published another article "Tänk om i språkundervisningen!"(reprinted in Ellegård and Lindell, 1970, pp.11-16), reminding both in title and effect of Viëtor's "Der Sprachunterricht muss umkehren" (1882). This time a vigorous and long lasting debate followed, mainly through articles in leading Swedish dailies.

The contributions to the debate have been collected in two paperbacks (Edwardsson, 1970, and Ellegård and Lindell, 1970). These provide valuable documentation of a variety of opinions on language teaching matters expressed by a large number of people involved--directly or indirectly--in the language teaching profession. Since scope does not allow us to give a detailed survey of the debate we shall have to venture some generalizations.

One side of the debate, represented by Ellegård and other university professors and researchers, backed up by a number of ordinary teachers, took a critical position toward the modified direct method both with respect to recommended practices and the theoretical assumptions behind them. Serious criticism was directed against the recommendations of the revised Curriculum (Lgr 69) because of the more radical position they represented as compared to the original, 1962 version. They also questioned the effectiveness of unilingual glossaries and grammars, and insisted that bilingual materials should be allowed to compete with current unilingual ones on equal terms. This group of debaters also maintained that the recommendations of the Official Curriculum were neither representative of teachers´ experience, as was claimed by the other party, nor of the existing results of experimental research. Apart from criticizing the method on theoretical grounds, the group drew attention to the declining foreign language proficiency of Swedish students at different levels. Some evidence from investigations and test results was presented. The blame for these poor results was put on the teaching methods which the teachers felt they had to employ in accordance with the Curriculum. Emphatic demands were made for non-dogmatic, unprejudiced attitudes on the part of educational authorities toward matters of methodology, as well as more freedom for teachers to choose their methods. As an alternative to the current method Ellegård launched the term insikt ('insight') implying the necessity of the cognitive element in the teaching process. His supporters repeatedly stressed the importance of experimental research from which to derive a basis for future recommendations for teaching methods, as well as the importance of closer cooperation between theorists and practitioners.

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[1] The term 'Direct Method' was not used consistently in the debate. As in this case, the debaters often referred to the approach recommended by the Curriculum as the Direct Method. In a previous section we suggested the term Modified Direct Method.

On the other side of the debate we find predominantly representatives of the National Board of Education--consultants, school inspectors, counsellors, and constructors of central curriculums—as well as some teacher trainers and teachers.

These debaters defended the much criticized curriculum, maintaining that it forbade neither grammatical explanations nor the use of the vernacular. If teachers interpreted it in this manner, it must have been due to a misunderstanding, they thought.

Ellegård´s interpretation of the curriculum and the modified direct method was considered much exaggerated by this group of debaters. They emphasized that "insight" was not only consistent with the intentions of the Curriculum, but it was exactly what the recommendations were meant to achieve. However, such an insight into the structure of the language ought to be attained through structured materials and inductive teaching instead of analytical explanations, which, they feared, would result in the return to old-fashioned grammar-grind and translation exercises. In fact, Ellegård´s "insight method" was labelled by Å. Andersson as the grammar-translation method in disguise (Edwardsson, 1970,

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[1] In Sweden instructional materials are scrutinized by the National School-Book Board. "No text-book can be used in these schools /i.e. the compulsory school and the gymnasium/ unless it has been approved by this Board" (Orring, 1967, p.149).

p.28). In defense of the Curriculum it was also maintained that it had been constructed on the basis of teachers´ accumulated experience and experimentation, since research results had been too meager to contribute to the practical aspects of language teaching.

The debaters also rejected arguments to the effect that the decreasing standard of the students´ foreign language proficiency was due to the use of the modified direct method. Instead, they claimed, the reason should be sought in the growing numbers of pupils admitted to schools of all levels.

It is illustrative of the dimensions of the methodological debate that some of the issues were discussed among politicians and used as arguments in more general discussions on educational policy. Eventually the director-general of the National Board of Education made a statement assuring teachers of their freedom in methodological matters.

As is common in debates, there was a group in a middle position which attempted to prove that the opinions of the opponents did not really differ so much, and that their views were, in fact, far from being mutually exclusive of each other.

There was at least one issue on which the debaters seemed to agree irrespective of their position in the discussion: the importance of research. That university professors and researchers repeatedly urged research, may be attributed to their position as theoreticians. But on this point they did not meet opposition from the other party. On the contrary, Axelsson, an educational counsellor at the National Board of Education, agreed that methodological innovations and revisions of the Curriculum ought to be based on methodological and linguistic research. However, he said, research must be related to the objective of the teaching, and must avoid grotesque classroom situations as a scene for experimentation. He criticized Lindell´s research (cf. Chapter 2, The UMT Project) as being irrelevant, on several points, to the recommendations of the Curriculum and the modified direct method (Edwardsson, 1970, p.25).

This was very much in line with the opinions of Hjelmström and Rudal, both consultants at the National Board of Education. They, too, said that research would make vaulable contributions to the improvement of teaching procedures, but they emphasized that research must be centered around essential problems and must be related to the objectives of language teaching, which presupposes cooperation between theoreticians and practitioners (Ibid., p.30).

Hans Andersson, a teacher trainer, supported Ellegård´s claim for more research, maintaining that little was known about the language acquisition process.

Heurlin, an upper secondary school inspector, hoped for generous funds for methodological research as a result of the debate, and admitted that work in the profession was guided by intuition rather than by scientifically substantiated experience. To what extent the specific teaching situation, the specific phenomena to be taught, or the specific type of learner should determine the appropriate amount of cognition, and how long grammatical rules should be retained are all questions to be answered by research and experimentation (Ibid., p.44).

1.2.3 The Teaching of Foreign Languages in Adult Education

The rapid expansion of adult education in Sweden in recent years has brought into focus a number of general and specific teaching/learning problems at the adult level.[1]

The aim of the present section is to outline the specific matters of foreign language teaching to adults that ought to be investigated in the light of research results. Before looking into these particular matters we shall give a brief summary of the causes and effects of recent changes in adult education in Sweden.

Recent Developments in Adult Education in Sweden

Appendix 4 contains some information about the various schools providing formal, vocational, and other training for adults. In this study we are primarily concerned with municipal adult education, a new type of education, which has expanded very rapidly during the few years of its existence. Since this type of education is based on the curricula laid down for the regular schools for adolescents, there is great similarity between the two, both with regard to content and form. Thus the municipal schools for adults offer extensive language programs, just like the regular schools. This similarity between the two schools provides a suitable framework for various comparative studies. Another reason why we are concerned with this particular type of adult education is that it is likely to have come to stay for many years ahead. It should be noted that the expansion of these schools in terms of enrolment has not taken place at the expense of other schools for adults. On the contrary, there has been a steady growth of enrolment in all types of schools for adults in recent years (see Eliasson and Höglund, 1971, p.14:2).

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[1] The term "adult" in "adult education" or "adult student" is used in a special sense throughout this study, and refers to people who have returned to school after having finished or interrupted previous studies, and spent some time in work. Thus in this sense of the word a university student of 25 is not an adult student if he has not interrupted his studies, but an 18-year-old worker who has taken up some subject in an evening class, is. Although the term "adult" may seem misleading, its use according to the above definition has been generally accepted in the literature of this field, and by adopting it we follow common practice (cf. Eliasson and Höglund, 1971, p.1:6).

The expansion of the municipal schools in the course of four academic years may be seen in the following approximate enrolment data based on Eliasson and Höglund (1971, p.10:6):

1967/68	12 300
1968/69	37 000
1969/70	62 000
1970/71	87 000 (estimate)

This development is, of course, due to the 1967 reform of adult education, the objective of which was to facilitate and stimulate education at the adult level. The reform in its turn was necessitated by a number of social, political, and economic factors, such as the growing need of an industrial community for better-educated adults, the increasing gap between the educational status of the young and the older generations resulting in an unfair balance in competition, the desire to promote equality between social classes, etc.

Descriptive Studies of Adult Education in Sweden. In connection with the reform, a special committee had been appointed to investigate the need for research and the training of specialists in the field of adult education. The committee had authorized a team of experts to survey the current situation of adult education, which eventually resulted in a thorough descriptive study based on the status of 1967 and subsequent years (Eliasson and Höglund, 1971). In its report (SOU 1971) the committee relied heavily on this study.

Another team of researchers has made a descriptive study of a representative sample of adult learners as compared to a norm-group of non-learners with respect to intelligence and personality features. The findings have been presented in two reports (Johansson and Molander, 1969 and 1970).

A sample of adult students at the gymnasium level of the Gothenburg School for Adults has been described with respect to certain background variables by Eva and Åke Lekberg (1971). The report refers to the spring term 1969. The main objectives of their study were to describe the students' social situation, including family and work, the reasons for putting off their studies to the adult level, the purpose of their current studies, and the degree to which they have adapted themselves to their situation as students at the School for Adults (p.6).

Another report (De gymnasiala ..., 1971) describes adult education in the Stockholm area with respect to its development before 1969, its status as of 1969, and the prospects for its future development. The report also includes two studies based on questionnaires, one of them administered to students (*Målinriktad vuxenutbildning i Stockholm*) and the other to teachers (*Stockholmslärare i vuxenundervisning*) at the schools for adults. The objectives of these studies were to describe the student and teacher population involved in adult education, with respect to social variables on the one hand and attitudes on the other.

Some Characteristics of the Adult Learner Population. The above studies provide information on the general characteristics of the student population, prospects for future development, and outline some urgent tasks necessary for the improvement of adult education.[1]

Descriptions of the population of adult students show that approximately 1.5 million people (or close to 20 % of the entire population) are involved in some kind of adult education. Since the majority are married and engaged in vocational or household work, it is characteristic of the adult learners that their loyalties are divided between family, work, and studies. Among those involved in municipal education we find a somewhat larger number of females than males. Women represent an older age group and dominate in the arts. The number of subjects studied varies between one and four with an average of two. Motives for their studies may be: to change to better jobs, or to advance in their jobs, to be able to proceed to higher education, or merely interest or pleasure in studying. Adult students are generally highly motivated and have a favorable attitude toward studies and school. There is great variety with regard to attitude to traditional or new teaching methods, pace of studies, need for advisory aid, various proportions between individual and collective teaching forms, and we may find large groups representing opposite poles. There is no clear pattern with respect to social background, and although the middle and lower income classes seem to dominate in the group as a whole, upper income class students may prevail in certain subgroups, as in the sample of gymnasium students described in Lekberg. A large variety of educational background is also characteristic of the population of adult learners. Those who have six- or seven-year basic education only, constitute larger groups and are in a majority at the comprehensive school level. It is emphasized in several studies that adult learners are characterized by larger heterogeneity both if viewed as a whole group and in classroom units. Some additional and more detailed descriptive data of the adult population, including some information on intelligence, will be given in Chapter 3 (Section 3.3).

Prospects for Further Development. As for the prospects for future development, further expansion of adult education can be expected. In the words of Eliasson and Höglund who have surveyed the entire field "To all appearances the period of great expansion in adult education lies ahead" (1971, p.14:3).

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[1] Exhaustive information on various background variables of adult learners, on which the summary in this section is based, may be found in the following sources: Eliasson and Höglund, 1971, Chapters 10 and 14; Johansson and Molander, 1969, pp.298-306; Johansson and Molander, 1970, pp.64-69; Lekberg, 1971, pp.133-139; De gymnasiala ..., 1970, pp.30-33.

A tendency toward further expansion is particularly likely in municipal adult education. The efforts being made to reach and recruit those adults who are in greatest need of complementary education may gradually result in higher average age and lower average intellectual level, especially in the comprehensive school.

Since a large proportion of the adult population has six- or seven-year elementary education only, it will be a long time before this group becomes a minority. A prognosis of the proportion of adults with a low level of education can be seen in the table taken from SOU 1971 (p.11). Judging from these figures the need for complementary formal education will be present for many years to come.

The Distribution of the Population Between 16 and 65 According to Educational Background (Percentages)

Type of Prior Education	1970	1980	1990
Elementary school with possible vocational training	68	50	31
Comprehensive school or lower secondary school with possible vocational training	23	25	22
Gymnasial, i.e. upper secondary school, old or new type	7	18	35
Degree from higher educational institutions	3	7	12

Tasks for Research. There are many reasons, both economic, social, and pedagogical, why better knowledge of the various aspects of adult education is of the utmost importance (cf.Eliasson and Höglund, 1971, pp.14:11-12). The blanks in this domain have to be explored by means of research. In some of the studies referred to above we find a number of suggestions for research to be conducted. Apart from actual research and experimentation, Eliasson and Höglund emphasize the importance of better statistical information and documentation, the dissemination of research results, and the training of teachers and teacher-trainers (1971,pp.14:12-14). The authors of SOU 1971:24 emphasize the heterogeneity of groups of adult learners in municipal schools, and they conclude that: "There is great need for diagnostic measures as a basis for education adapted to individual needs, as well as for instructional materials developed specifically for adults. Methodology in combination with various instructional materials has to be developed" (pp.30-31).

Johansson and Molander express similar views about the importance of experimental research in methodology because of the heterogeneous character of the population of adult learners, emphasizing the immediate need for experimentation "which enables us to study the effects of different teaching methods for adults"

(1969, p.304). These conclusions expressed in the preliminary report are confirmed in the final report: "We must construct teaching methods which are flexible and which can be adapted to the type of students who are to be guided toward the goal of their studies. This applies especially to qualification-oriented adult education" (1970, p.69).

Conclusions. On the basis of what has been said in the present section it can be concluded that at a certain stage of economic growth and social development of an industrial community the need for training and re-training large groups of adults becomes inevitable and permanent, which implies that adult education must become one of the major concerns of modern societies. The resources that must be invested in this educational process amount to a considerable proportion of the state budget. The knowledge of how to make this investment as fruitful as possible must be derived from research.

It will be shown later in this study (Section 3.3.2) that the teaching of foreign languages constitutes an impressive part of the training of adults. From this follows that linguistic science will have to devote itself to a great extent to investigating the special problems of foreign language acquisition in adults. Careful study of the literature of the profession gives the impression that this is an almost neglected area, especially if the term "adult" is defined as in the beginning of this section. However, increasing concern with the problems of adult language-learners can be seen in the arranging, in rapid succession, of two international conferences devoted to language teaching to adults. One of these, the Symposium on Linguistic content, means of evaluation and their interaction in the teaching and learning of modern languages in adult education, organized by EUROCENTRES, was held in May 1971, in Rüschlikon, Zurich, Switzerland. The conclusions of the Symposium form "a solid stock of ideas and proposals on which to draw in the future concerning research and development in the field of Modern Language Teaching-Learning to Adults" (Symposium, 1971, p.8). It was suggested that this program should pay particular attention to the following:

(1) A statistical survey of existing patterns of adult language study in Europe with a view to establishing the major categories of adult language learners and their needs, both now and in the foreseeable future.

(2) The structure and typological classification of situations.

(3) The fundamental psychological processes of adult foreign language acquisition with particular reference to the transfer of skills and the relevance of grammatical grading.

(4) That various centres carry out experimental research on the comparative efficiency of the various forms of organisation of linguistic content and on the use of different media.

(Symposium, 1971, pp.10-11)

The other conference, the ASLA/AIMAV Seminar on Modern Language Teaching to Adults, is to take place in April 1972 in Stockholm.

Second Language Acquisition in Adults

There is good reason to believe that the process of second language acquisition is not uniform, and that differences in this process are largely dependent on age. The immigrant family whose members of different ages achieve different degrees of proficiency in the new language may serve as a typical, and therefore often used, example to support the belief that children learn a second language more readily than adults. It even seems safe to say that the younger the member of such a family the more likely he is to acquire a native-like knowledge of the language he is exposed to in the new environment.

This example, however, is valid of second language learning by exposure only, and must not underlie generalizations to the effect that children are superior foreign language learners to adults under all conditions. It cannot be taken for granted that children are more successful than adults when learning foreign languages in the classroom. In fact, as will be shown in this section, opinions on this point differ widely. However, both theoreticians and practitioners seem to agree that children, as compared to adults, learn foreign languages differently and with different results even in a classroom setting. Consequently, the teaching process must be influenced by, and adapted to, the particular language learning capacities determined by age.

It is evident then that we have to distinguish between two main types of foreign language acquisition. If a learner acquires a language as a result of being exposed to it--one may say: from "total immersion"--and without any systematic teaching process involved, he is learning the language in a way that we may call "natural". Talking about language-learning "by exposure" we seem to oversimplify the matter. What we really mean is to learn a language from being exposed to, and actively involved in, the language used in one's natural environment. This is the way infants learn the language or languages used in their immediate environment and this is also the way most immigrants have to learn the language of their new country. In the latter case, however, language learning may not be an entirely natural process, since it is possible that such language acquisition involves a certain amount of conscious or sub-conscious self-instruction on the part of the more mature learner.

The other type of language acquisition is the result of an intentional teaching process in more or less organized and systematic forms. This is the most common way of learning foreign languages outside bi-cultural environments. This is also the type of language learning millions of foreign language students--children, adolescents, and an increasing number of adults--experience in foreign language classrooms. We may call this "artificial" language acquisition, as opposed to the "natural" language acquisition described above. It is, of course, "artificial" language acquisition we are mainly concerned with in the foreign language teaching profession. This does not mean, however, that we are not interested in the process and results of "natural" language learning. Knowledge gained from this area may very well have some important implications for second language teaching.

The present section will be devoted to the two ways of language learning outlined above with special regard to adult learners. For the sake of brevity we shall use the terms "natural" and "artificial" language acquisition, well aware that the terms are not quite adequate.

The "Natural" Way of Language Learning. In a previous section we have dealt with the child's acquisition of the mother tongue. Summing up what was said there, we may say that the behaviorist theory of first language learning has been largely abandoned in favor of a theory according to which every normal child is predisposed to language acquisition and will develop language behavior according to a maturational time-table. This language development, it is maintained, is not so much the result of conditioning, environmental stimuli, and parental teaching--as the behaviorists claimed--as of an inborn capacity which enables the child to develop language when exposed to it.

For this theory speak observations that children everywhere develop language behavior according to the same lawful pattern, independently of their cultural and social environment, often even against considerable odds, such as lack of parental and environmental stimuli, and even deafness and muteness.

There is plenty of evidence that if exposed to more than one language, for example in a multi-lingual environment, children can learn several languages with equal ease, often without showing signs of confusion or interference from one language to the other. However, the ability to learn languages in this "natural" way seems to decline with advancing age, and the later the learning of the foreign language sets in the more likely it is to bear the imprints of the first language. The reasons for this gradual change of the language learning capacity are not known. Penfield attributes great importance to the effect of biological differences between people of various age groups on their language learning capacity. He has found that the chances of relearning the language after injury in the brain are much greater for children than for adults. He concluded that "The brain of the child is plastic. The brain of the adult . . . is usually inferior to that of the child as far as language is concerned" (1959, in Michel, 1967, p.197). It is this declining plasticity of the brain that explains why the child's specialized capacity for learning language decreases with the passage of years.

It has been mentioned before that puberty seems to represent a critical period in the language learning capacity of humans. According to Lenneberg "the incidence of 'language-learning-blocks' rapidly increases after puberty. Also automatic acquisition from mere exposure to a given language seems to disappear after this age, and foreign languages have to be taught and learned through a conscious and labored effort. Foreign accents cannot be overcome easily after puberty" (1967, p.176).

It seems safe to conclude that while children can and do acquire languages in the "natural" way, this ability declines with age. The reasons for this change in the "natural" language learning capacity of a human being may be due to biological factors, e.g. decreasing plasticity of the brain, psychological factors, e.g. mounting inhibitions and other "language-learning-blocks", or probably combinations of the two. We know next to nothing about this.

Some writers, however, question the assumption that, by a certain age, the inborn language learning mechanism ceases to operate. Bolinger, for instance, says: "All we know is that most adults do not learn as readily as children do just by exposure. But in actual fact we do not know that the process in the child is one of simple exposure either, nor can we be sure that the real reason for an adult´s failure to learn that way is not the many external interferences that cause him to shun the opportunities. In any case, it would be a shame not to experiment with this promise" (1968, p.41).

Others disregard the difference between the "natural" and the "artificial" way of learning a language. Penfield, for instance, on the basis of his research finding in the field of neurophysiology, suggested that language teaching should be introduced at an early age, before the child loses his specialized language learning capacity, assumedly dependent on the plasticity of his brain. Dealing with Penfield´s suggestion Jakobovits questions the relevance of neurophysiological evidence for second language learning and teaching, and insists that it is primary or first language learning that is dependent upon the child´s biological mechanisms (1970, pp.52 ff.). We assume that by primary or first language learning he means what we have called "natural" language acquisition.

Impressed by children´s ability to learn one or more languages with ease and perfection, language teachers have long attempted to use the child´s language learning process as a model for second language teaching. However, these attempts could not possibly be very successful for at least two reasons: firstly, no classroom situation can duplicate the conditions under which a child acquires a language--native or foreign--in a natural way, and secondly, even if this were possible, adolescent and adult learners would--according to our argument above--be likely to have lost at least part of the ability to acquire a language from just being exposed to it. Therefore all attempts to apply experience and knowledge from "natural" language acquisition to the field of language teaching, i.e. the artificial way of developing language proficiency, must be met with suspicion. As Stern says "whatever view of first language acquisition we adopt, it is in no way prescriptive for second language teaching" (1970, p.63).

The "Artificial" Way of Language Learning. Even though it is still common to recommend a certain method on the grounds that a child learns his first language that way (cf. Stern, 1970, pp.57-58), the so called natural methods have been largely abandoned and it is realized that language teaching--whether of children or of adults--is an artificial process in which more is needed than exposing the student to the target language. Moreover, the process has to be shaped with regard to a number of factors, such as the objectives and the level of the course, the intellectual level of the students, the relationship between the native and the target language, and--last but not least--to the age of the students. The opinion that "The treatment which would suit a child ten years old will be most unsuitable for adults, and vice versa" (Palmer, 1968, p.25) is probably shared by the majority of theorists and practitioners of the language teaching profession. But what exactly the treatment ought to be at a certain age level is largely a matter of guesswork based on common sense and experience rather than on definite knowledge based on research.

Most practitioners seem to agree that the younger the learner the greater his ability to mimic, and that the ability to apply abstract rules increases with age. Consequently, imitative exercises and drills should prevail in the younger classes, while theoretical explanations and analysis should be used at higher age levels. These views are evidently widely accepted among Swedish teachers with experience from adult education. Here we refer to the statements made by a number of teachers in a teachers' attitude inventory. These statements have been collected in De gymnasiala ... (1970, pp.150-153).

Here are some randomly selected statements from various writers on language teaching:

"In the presentation of the structure and meanings of the language children may need only examples, whereas more mature learners may demand to know the rules. New associations are established more easily in children; adults have a body of associations not easily disturbed" (Mackey, 1965, p.325).

"Adults and older people have maximum difficulty in hearing the sounds of the foreign language and in producing them. . . . Younger people . . . have great facility imitating foreign sounds and remembering them" (Lado, 1961, p.19).

"Young children learn sounds more accurately and with more enthusiasm than their elders. As you grow older, you begin to lose this capacity for easy imitation. But to make up for this loss, you have the advantage of being able to reason: You can analyze language" (MLA, 1966, in Michel, 1967, p.386).

Such views have not been substantiated scientifically and, as will be seen, are not shared by all experts either.

Some Views on Improving Language Teaching to Adults. In order to make the teaching of languages to adults more efficient we have to gain a better insight into a number of factors influencing the language learning process in adults. Experiments assessing the relative merits of various teaching strategies and techniques at various age levels have long been overdue. In view of the increasing number of immigrants and adults involved in basic education in many countries, experimental research should focus attention on the language learning capacities of adults with low educational background. Unless we know more about the specific language learning capacities distinguishing adults from the young, it is very likely that whatever is known or assumed about the teaching of the young will automatically be carried over and applied to the teaching of adults. Even though we have no reason to believe that adults, in a classroom situation, are poorer language learners than children in the same situation, it is very likely that for biological, psychological, and probably other reasons, adults learn in a different way. As there is a scarcity of empirical evidence to support this statement, the following two experiments may be worth mentioning.

In his article "Adults Versus Children in Second-Language Learning: Psychological Considerations" Ausubel refers to Thorndike, who found many years ago that children make less rapid progress in language learning than adults when learning time was held constant (Ausubel, 1964, pp.420-421). The other experiment, referred to by Jakobovits (1970, p.56), is of very small dimensions indeed, involving two subjects only. The purpose of the study was to "examine some aspects of the commonly held view that young children are better able to learn the phonology of second language than adults." The authors concluded that their results "do not provide any evidence indicating that children are better than adults in acquiring novel speech sounds." In our opinion, the authors should have added to their conclusion: "in an 'artificial' language learning situation."

In the rest of this section we shall review three articles whose common aim is to contribute to the improvement of foreign language teaching to adults. These articles reveal fundamental differences between the assumptions about the language learning ability of adults underlying the authors' recommendations.

In "Necessity and Sufficiency in Language Learning" Newmark and Reibel (1968) argue that "we abandon the notion of structural grading and structural ordering of exercise material in favor of situational ordering" (p.152). This recommendation is based on the example of the child indicating "that situational rather than grammatical cohesion is what is necessary and sufficient for language learning to take place" (p.151). An interpretation of these arguments could be that authors rely on the assumption that--similarly to the child--adults possess the ability of building up linguistic competence from being exposed to situational language use. This, then, is a shift from audiolingual practices, characterized by situational randomness, to direct method practices, characterized by structural randomness. The authors even refer to works by Gouin, Sweet, and Jespersen, in which "Arguments concerning language learning abilities in the adult on the analogy of those of the child are used explicitly--albeit inconsistently" (p.152, Note 13).

Foreseeing some of the common objections to drawing parallels between language acquisition in children and in adults, the authors discuss and attempt to invalidate the following four arguments for treating the adult as a different kind of learner from the child:

(1) The child´s brain is different from the adult´s,

(2) The child has much more time to learn the language,

(3) The child is much more strongly motivated, and

(4) The child offers a tabula rasa for language learning.

At the end of their discussion the authors arrive at the conclusion that "the adult must be appreciated to be a potentially magnificent learner of languages" possessing a language learning capability that enables him "to acquire the general use of a foreign language by observation and exercise of particular instance of the language in use" (p.161).

It is clear then that Newmark and Reibel advocate a teaching strategy for adults that is fairly similar to the "natural" learning process in children and that they reject the view that the child´s natural language learning capacity dwindles.

A different view is expressed by Wolfe in his article entitled "Some Theoretical Aspects of Language Learning and Teaching" (1967). His position, entirely in line with Chomsky´s theory, is that language acquisition in the child is a natural process, whereas in the adult this process must be artificial. The infant brain is predisposed toward the acquisition of the grammar of natural language, whereas "the adult has developed, in the course of his maturation, a general overall psychological consciousness equipped to deal in generalizations and abstractions as well as with linguistic concepts" (p.174). This is why "few adults can learn a language in the street" and "few children learn the language artificially" (Ibid.).

Wolfe´s practical conclusion is to recommend some improvements in drill exercises for adults. He suggests that incoherent drill sentences, which are most often untrue to the real life situation of the teacher and student, should be replaced by exercises in which teachers and students talk factually about things and events.

A third position is taken by Ausubel (1964). He admits that children have some advantages over adults in foreign language learning as far as pronunciation and some intrinsic psychological factors go, but adults possess both a larger vocabulary and an ability to use grammatical generalizations which more than counterbalance the lack of the other capacities. He concludes that "adults can acquire languages more readily than children", and takes the position that "certain features of the audio-lingual approach are psychologically incompatible with effective learning processes in adults" (p.420). On these two points there are undoubtedly similarities between Ausubel´s article and the one by Newmark and Reibel. However, with regard to further argumentations and conclusions, the two articles have little in common.

In the rest of the article the author discusses some audiolingual techniques which he finds inappropriate for adults. These are the rote learning of phrases, inductive learning of grammar, avoidance of the native language, the prior presentation of materials in spoken form (the "natural order"), and the "natural speed rendition" of the second language. As alternatives to these techniques he proposes in respective order: meaningful pattern drills, deductive grammatical generalizations, the indirect learning of new terms for familiar concepts through native language terms, simultaneous exposure to written form of the material, and initial slower rate of speech, which is progressively accelerated.

The articles reviewed above demonstrate that there exist widely differing and even opposing ideas among linguists as to the language learning capacities of adults, and consequently as to how adults are best taught a language. It is also apparent that none of these authors consider adults inferior language learners in an "artificial" situation, while few deny that children make better and more rapid progress in a "natural" situation.

1.2.4 Summary

Developments in linguistics in the past fifteen years or so have intensified the age-old controversy about a mechanistic versus a mentalistic view of language acquisition. As a result, the audiolingual method, with its habit-forming techniques reflecting a behavioristic view of language acquisition, has been challenged and criticized seriously during the 1960´s. Cognition, as an element facilitating foreign language learning, provided by an analytical approach of comparing and contrasting second language patterns with native language equivalents, has been recommended as an alternative or complement to habit-forming techniques by many psychologists and linguists urging a re-evaluation of audiolingualism.

Resulting from this controversy, discussions of both the theoretical and practical aspects of foreign language teaching have become characteristic of the profession. One example is Sweden, which, in recent years, has experienced a vigorous and long-lasting debate.

The tremendous expansion of adult education in Sweden and elsewhere in the past few years has brought into focus the special problems of learning after adolescence. Although, as a rule, children acquire a language in the "natural" way more readily than adults, there is no reason to believe that children are also superior to adults when learning languages in an "artificial" way, e.g. in a classroom. However, there is considerable agreement that, since a human being's language learning capacity changes as he grows older, language teaching has to be shaped with special regard to the age of the learners.

The research described in this study should be viewed against the background outlined above. It is only through experimental research that we can gain a better insight into the language learning process. Proper knowledge of the mental process of second language learning in various types of learners may eventually reveal the secret of appropriate teaching methods. This prospect, however, seems to be far beyond our horizon, and therefore research must have other, more immediate objectives as well. It appears that the natural contribution of research to the improvement of language teaching ought to be made by evaluating the merits of various teaching procedures at different age, proficiency and aptitude levels. Without empirical evidence from carefully controlled experiments language teaching will, in all likelihood, continue to be based on faith in one method or another, experience, and intuition. "Scores of successful teachers follow their intuitions, and often with good results. But we will never settle for letting our intuitions decide the crucial modus operandi" (Frey, 1968, p.351). Besides such subjective measures as faith, experience, and intuition, valuable as they may be in the teaching profession, are likely to lead to conflict and meaningless debates whenever they underlie recommendations to be followed by others.

Reviewing recent methods and trends in second language teaching, Hammerly finds it difficult to escape the feeling that "the profession moves from fad to fad to fad because of lack of evidence to support any of its practices. The only hope remains in a thorough, careful program of experimentation" (1971, p.504). In his view a series of short- and long-term experiments in second language teaching over a period of about eight years would give the answers "to most of the questions that our profession has been pondering and arguing about for many, many years" (Ibid., pp.504-505).

Experimental research aimed at testing theories of language acquisition and/or the efficiency of teaching procedures meets with many difficulties. As Bosco and Di Pietro say, "Unfortunately, language instruction has so many facets that strict controls necessary for experimentation are not readily established and maintained and the performance of students is not easily evaluated" (1970, p.1). It is the large-scale experiments, e.g. those aimed at testing the efficiency of teaching methods in all-round language proficiency, that leave so many variables uncontrolled that convincing conclusions are difficult to draw. On the other hand, small-scale experiments in which all variables, except for the experimental one, are under rigid control, are usually carried out in such unrealistic settings that results are difficult to apply to ordinary classroom conditions.

In our case a large-scale experiment was not only far beyond our resources, it was also outside the scope of our interest and objectives. Besides, there seems to be a growing scepticism about large-scale experiments. This is expressed, for instance, by Bosco and Di Pietro:

"We are convinced that research which attempts to demonstrate the superiority of one strategy over any other is misdirected because of the multiplicity of features underlying each strategy and the problem of co-occurrence of features across strategies. Any effective evaluation must be done in terms of feature of strategy rather than of strategy considered as a global entity" (1970, p.3, Note 4).

In our experiment we concentrated on the teaching and learning of grammatical structures. The reasons why we have selected this particular problem will be given in Section 1.2.5.

The study of research in applied linguistics reveals great dearth of investigations in which attention is paid to the language teaching/learning problems of those adults who have **low** educational and linguistic background. Moreover, experiments comparing the effectiveness of various teaching techniques at various age levels are lacking. By selecting, as subjects, adults who have basic education only, and by planning replications of our investigation at other age levels, both adults and adolescents, it is hoped that the present experiment may serve as a contribution to filling in these gaps.

1.2.5. Why Grammar?

Our decision to investigate the effectiveness of two approaches to grammar teaching was mainly due to two major considerations:

(1) achieving grammatical competence is one of the keystones in the acquisition of second language skills, and

(2) the teaching of grammar has long been, and still is, one of the most controversial issues of second language teaching.

In order to clarify some concepts about grammar we shall make use of H.H. Stern's statements in "Grammar in Language Teaching".[1] In this paper Stern distinguishes between grammar A which is "the full hypothetical competence of the native speaker of the total grammar of his language" and grammar B, i.e. "a descriptive statement or analysis of grammar A." Since "no foreign language learner can be expected to master the full complexity and grammatical nuances that constitute the mastery of the native speaker," the competence to be achieved in a particular foreign language course cannot be but a selection from grammar A. "Selection is an inherent characteristic of all methods. No man can teach the whole of a language" Mackey says (1965, p.161). We shall label such a selection grammar A1 and the corresponding descriptive statements grammar B1. Since it is both possible and reasonable to devise different grammar syllabuses, we can speak of any number of restricted grammar competences (A1, A2, A3, etc.) and their descriptive statements (B1, B2,

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[1] We are referring to a mimeographed copy of this paper. We have learnt from Dr. Stern through personal communication that the article has not been published in this version. It was written in 1968 as a discussion paper.

B3, etc.).[1]

There is little doubt that all foreign language teaching has to aim at being "grammatical", or in other words, it has to attempt to impart to the learners grammatical competence within the limits of its grammar A1. Carroll holds that "'knowing the language' means, first of all, knowing its phonology and grammatical structure, for the common core of material which must be learned in these areas is relatively fixed in comparison with the learning of vocabulary" (1963, p.). To Fries learning a new language without learning the grammar of that language is an impossibility (1946, in Byrne, p.40), and in Lado's opinion "Anyone using a language must use its grammar; mere words without grammar do not constitute a language (1964, p.90). In Brooks' words "grammar is to language what anatomy is to the human body" (1964, p.153). Returning to Stern, we may say that his statement that all teachers welcome and aim at teaching pupils skill in grammar A1 seems well justified. We can, therefore, conclude with Stern that "non-controversial is that language courses should lead to defined grammatical competence," i.e. grammar A1. What is controversial is whether, in order to reach competence in grammar A1, it is necessary to study grammar B1, or in other words, to learn rules of grammar and to acquire grammar concepts, or whether such rules and concepts are really only a hindrance, an encumbrance, and added complication."

If we relate what has been said above to the various methods presented in previous sections, we find that three of them, namely the direct method, the audiolingual method, and the modified direct method represent, in varying degrees, methods in which the teaching of formal grammar is de-emphasized. Common to these methods is that grammar is taught inductively and preferably without explicit explanations. However, while the audiolingual method and the modified direct method make use of a carefully selected and limited grammar A1, the direct method does not aim at teaching such a clearly defined grammar. As Rivers says, the study of grammar in the direct method was confined to those areas which were continually being used in speech" (1968, p.19). The direct methodists did not deny the importance of grammaticalness, but failing to elaborate a grammar A1, they covered incoherent areas of the vast surface of grammar A, which was likely to result in inaccurate fluency, and non-grammatical use of the target language.

What we eventually did in our investigation was to devise and use two strategies aiming at grammatical competence within the limits of our particular grammar A1. The one without formal grammar we called the implicit (IM) method, the other, emphasizing the role of grammar B1, we labeled the explicit (EX) method.

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[1] In the article referred to in this section, Stern uses the labels grammar C and grammar D for what we call grammars A1 and B1. Our labels have been chosen in order to emphasize that the restricted grammar is always a part of the entirety.

It may be mentioned that the particular grammar A1 determining the aims of the experimental lesson series is actually part of the grammar curriculum for the comprehensive school level, although --depending on the course--the grammatical structures selected for our purposes usually do not occur until grades 8 and 9.

As has been shown, the approach to grammatical competence without, or with limited use of, formal grammar is characteristic of several methods that have played leading roles in foreign language teaching. This in itself seems to justify experimental research in which the effectiveness of such a non-grammatical approach is seriously put to the test. It is true that the number of those who dogmatically reject the teaching of formal grammar is small, and that the majority suggest that grammar should be used in varying degrees depending on age and other factors. Especially common is the belief both among teachers and linguists that the younger the student the less explicit the teaching of grammar should be, and that adult learners want and need grammar rules and explicit explanations (cf. pp.1:34 ff.). The question arises then whether an experiment in which adults are exposed to a treatment completely devoid of grammar B1 is justified at all. In our opinion it is, the reasons being as follows:

(1) However convincing the argument that the need for explicit explanations increases with age, this assumption--as any other--has to be substantiated by empirical evidence.

(2) We must distinguish between different types of adult learners--a heterogeneous population indeed. Adults learning a second language are easily associated with undergraduates or other groups whose ability to reason and apply rules in practice is well developed. In the present study, however, it is a different type of adult learner we have in mind (cf. p.1:29, Note 1). If we agree with Stern that "A general principle might be that the younger the learner, the lower his educational level, and the less experience he has in language learning the smaller and the more carefully dosed should be the load of formal grammar" [emphasis supplied] the "non-grammatical" method seems justified when teaching adults represented by our experimental population.

(3) In the teaching of foreign languages to groups with participants of different nationalities--probably with no common language for communication between teacher and student--the possibilities for using an analytical method are rather limited. At any rate, comparisons between the structure of the target language and that of the native tongue are hardly possible, and therefore, other methods must be tested. In view of present trends in immigration it can be assumed that the need for teaching both the language of their new homeland and other foreign languages to multi-national groups of adult learners will increase in the future.

(4) An experiment like the one described in the present study may not only confirm or refute the assumptions about the necessity of more formal grammar at the adult level, but-- if followed up by replication studies at different age levels--may yield valuable information on assumed differences in the learning of grammatical patterns between various age groups.

1.3 Objectives

The main objective of the research described in this study is to test which of two major language learning theories provides a better basis for the teaching of second language grammar to adults. This objective is to be achieved by assessing the relative effectiveness of two methods of teaching grammar. The experimental treatment which we call the implicit method (IM) is based on the audio-lingual habit theory, and reflects a mechanistic view of language learning, while the explicit method (EX) relies on the cognitive code-learning theory, and reflects a mentalistic view. The terms of the two theories originate from Carroll and are defined in one of his articles (1965). His definitions are also quoted in this study (see Section 3.5).

Theoretically the following alternative results can be expected: (1) one experimental method will result in better learning than the other, (2) no differences will be found, and (3) the methods will produce different learning effects in different skills.

Whether or not any differences are found in the entire achievement of the two groups, there is the possibility that progress may vary on the different grammatical structures taught. Therefore, the experiment has been planned so that the students' progress on five different individual structures can be evaluated.

It can also be expected that the experimental methods will suit different types of learners in different degrees. Therefore, another objective of the experiment is to investigate possible interaction between methods on the one hand and age, proficiency, and aptitude on the other.

Since it is commonly held that learning is largely dependent on motivation and attitude, one important objective is to assess possible attitudinal differences generated by the two treatments, irrespective of the results with regard to learning. Attitudes toward the different teaching techniques will also be investigated.

As the experiment is dependent on adequate teaching materials and evaluation instruments, it offers good opportunities for developing, trying out, and evaluating alternative instructional materials and various types of tests.

CHAPTER 2

RELATED RESEARCH

2.1 Introduction

Methods of teaching foreign languages have long attracted research interest, but it is mainly in the last decade that controlled comparative studies, based on defined theories of learning, have been carried out. Experiments conducted before the 1960s were often inadequately controlled, and the instructional techniques investigated were not closely linked to theories and findings in learning psychology. The controversy over audiolingual versus traditional methods during the 1950s and 1960s, intensified by the alleged lowering of standards in the schools, brought about a rising demand for an objective assessment of the merits of various contemporary teaching practices. Also, in hand with this urge for empirical evidence to guide the profession, new developments in linguistic theory led to a challenge on theoretical grounds of certain assumptions concerning the nature of the language acquisition process.

This survey, therefore, deals primarily with fairly recent studies on methods in language-training, notably those which compare audiolingual and traditional approaches to the teaching of grammar.[1] In view of the rather unfortunate neglect, or ignorance, of research findings in this field of applied linguistics--which may be due to a lack of easily accessible surveys--the account has been made fairly extensive and detailed, so that the reader may get a rough estimate of the scope and nature of the research going on. This in no way implies that the information here supplied is exhaustive or sufficient. For a just and exact appraisal of the significance of each individual piece of research the reader is always referred to the investigator's own report.

The focus of interest is on studies investigating the effect of grammatical explanations on language acquisition. Apart from this main objective, some special attention is also given to the role of deduction and induction in grammar learning, since they are the principles inherent in the two methods used in the present study.[2] Closely connected with the deduction-induction aspect of language learning is the proper timing of the explanation in the practice sequence. Experiments dealing with this problem are reported.

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[1] The Agard and Dunkel investigation, carried out between 1945 and 1948, has been included mainly because of its pioneer character and because of the wide attention it has been given in the literature.

[2] Deductive language teaching refers here to techniques which give explanations at an early stage of practice: inductive teaching either gives no explanations at all or gives them as generalizations at the end of practice. The terms directed and discovery learning have also been used with reference to these techniques.

Research with obviously limited relevance to the normal classroom situation, such as verbal learning experiments with paired associates, has not been considered.

A distinction has been made between studies investigating overall language proficiency and discrete studies investigating specific aspects of the language learning process, mainly the acquisition of grammar.

2.2 Broad Comparisons

This section will review broad comparisons between traditional and audiolingually oriented methods of language teaching, or, in more modern terminology, between cognitive code-learning and habit-forming methods.

Agard and Dunkel

The first large-scale attempt at this kind of evaluation was the Agard and Dunkel investigation conducted just after the Second World War, in which data from a large number of high schools and colleges throughout the United States were collected and analyzed (Agard and Dunkel, 1948). Only limited conclusions can be drawn from the study, since it was not, as Carroll observes, very strictly controlled.[1] The objectives of many courses in the experiment were rather imprecise--which made measurement of them a difficult task--, there was no exact check on classroom activities, and data on previous knowledge of the language were not collected (Agard and Dunkel, pp.10-11).

Results were reported in very general terms:

". . . the majority [of the 'oral-aural' students] were observed to have a continuing production superior to that of conventional students who were taught to speak by rules of 'how the letters are pronounced', and who have never heard a native speaker" (pp.287-288).

"By and large, experimental students failed to understand the phonographically recorded utterances of an unfamiliar native speaker, delivering unfamiliar though easy material, significantly better than did conventional students" (p.289).

"In general, . . . the experimental groups did not demonstrate so high a level of reading proficiency at the end of their first or second year as did conventional students. In a number of cases the results were significantly poorer" (p.290).

"In the vocabulary parts of the reading tests, the experimental students knew fewer words than conventional groups" (p.290).

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[1] Carroll (1963): "The Agard-Dunkel study should be regarded as a comparative survey study rather than as a true experiment. Exact controls and rigorous experimental design were lacking, and few penetrating measures were taken" (p.1067).

"On the grammar sections of the Co-operative tests, experimental students generally tended to be as successful as conventional groups" (p.290).

Thus, conventional and "oral-aural" methods seemed to produce comparable learning results on an overall count.

Scherer and Wertheimer

A very thorough and careful attempt at assessing the relative effectiveness of an audiolingual and a traditional multiple-approach method was made at the University of Colorado in 1960-62 (Scherer and Wertheimer, 1964). Some 300 beginners of German, distributed over the two methods by random assignment, were taught the language for two semesters by specially instructed teachers. There were no learning theories specified as bases for the two methods, but the techniques used can be related to the habit-formation theory and the cognitive code-learning theory later formulated by Carroll (1965, p.278). The audiolingual groups received only aural-oral training in the first twelve weeks; reading and writing practice was delayed until the thirteenth week. Over the year, there was an emphasis on structure drills and laboratory work, although, which should be noted, directives allowed both grammar and other explanations in connection with pattern practice, as well as translation when deemed expedient. The traditional groups practised all skills from the first week but did not make use of the laboratory. Contrastive grammatical analysis was made a regular feature of the lessons. Grammatical terminology was taught and employed in the preparation and interpretation of reading material, and the written exercises included translation into the target language.

Originally the investigators had planned to run the experiment over two years, but because of practical difficulties it became impossible to give differentiated instruction in the third and fourth semesters. The students participating in the experiment had to be distributed among the ordinary classes, which naturally tended to even out differences obtained after the first year. At the end of each semester all groups were given test batteries consisting of speaking, listening, reading, and writing tests. Some of the reading and writing tests involved English-to-German and German-to-English translation. In addition a number of tests measuring certain other skills, motivation and attitudes, were administered.

An overall proficiency score computed at the end of each semester showed that there was no material difference in achievement between the audiolingual traditional groups. The following is a brief record of achievement in the various skills:

(1) Listening comprehension. The audiolingual groups was significantly better at the end of the second semester. At the end of the fourth semester there was no difference between audiolingual and traditional students.

(2) Speaking. The audiolingual students were significantly better throughout the experiment.

(3) Reading. The traditional group was significantly better at the end of the first year. The difference remained at the end of the second year but was no longer significant.

(4) Writing. The traditional group was significantly better throughout the experiment.

(5) German-to-English translation. There was a highly significant difference favoring the traditional students. This difference continued throughout the second year.

(6) English-to-German translation. The traditional students displayed a significant superiority during the first year. By the end of the second year the difference was no longer significant.

The general conclusion that one can draw from these results must be that the two teaching methods did not differ in overall effectiveness, although, depending upon what features had been emphasized in the lessons, quite substantial differences were obtained in the various isolated skills tested. From this it would follow, then, that the goals we set for language instruction should decide what teaching method to employ.

Two remarks will conclude this review. Firstly, as the main objective of the experiment was to test the relative merits of two full-blown teaching methods, aiming at general language proficiency, it is difficult to say to what extent the findings can be generalized to our more specific field of inquiry, namely how one acquires grammatical proficiency in a language. The Colorado experiment assessed overall achievement attained in two commonly used teaching methods, but the basic problem of whether second language acquisition is a matter of forming habits or developing conscious control of grammatical structure was never attacked, nor, indeed, was this primarily intended. Secondly, while many difficult variables were held under control, the most important one, teacher performance, was not really "neutralized".[1]

Admittedly, most comparative method studies exhibit the same weakness in design, but until this problem has been seriously tackled and solved no really conclusive research results can be hoped for.

The Pennsylvania Study

Another complex comparative study on foreign language teaching methodology was undertaken in Pennsylvania between 1965 and 1969 by Smith and his research team (Smith and Berger, 1968; Smith and

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[1] Cf. Rivers (1968): "The effectiveness of any method in a particular situation is a function of the actual classroom performance of the individual teacher" (p.50).

Baranyi, 1968; Smith, 1969).[1] Stated very generally the aims were to evaluate three teaching strategies: a "traditional" method (TLM), and two audiolingually oriented methods ("functional skills" method, labeled FSM, and "functional skills plus grammar", labeled FSG). Utilizing three types of language laboratory equipment (tape recorder, audio-active system, and audio-active-record system), they also tried to determine the best teaching strategy--language laboratory combination. Other objectives included studies of suitable predictors of foreign language achievement, intercorrelations among language skills, instructional materials, and the role of the teacher in language training.

In the first year 104 classes of French and German made up the experimental population. They were taught by carefully instructed teachers, who adhered to certain pedagogical principles decided upon by a panel of prominent foreign language experts. Field consultants and instructional guides observed classroom activity and gave additional advice to the teachers, in order to ensure that the intentions and plans of the project staff were satisfactorily implemented.

The teaching strategies were to have the following distinguishing characteristics, according to the expert panel:

TLM - Use of the native language predominant; translation exercises; grammatical structures to be organized and analyzed before practised in class.

FSM - Target language to be used throughout the lessons, except for describing grammar; the "natural order" or language skills to be observed (i.e. hearing--speaking--reading--writing); printed material always to be preceded by oral presentation.

FSG - As FSM, but with some emphasis on the explanation of grammar in connection with pattern drills.

The difference between FSM and FSG does not seem to be very distinct judging from the lists of general criteria in Smith and Berger (1968, pp.21-25). Thus, the comparison here seems really to be between one audiolingual strategy and a traditional strategy. To this should also be added that FSM allowed the use of English for clarification of difficult points and that the teacher was instructed to answer all questions concerning grammar. Further, there is some evidence from the "adherence to strategy" ratings by classroom visitors that there was no radical difference between the TLM and FS methods with respect to oral practice in class.[1] Carroll observes in his interpretation of the results: "From this evidence /adherence to strategy' ratings/ it would appear that the TLM students used oral language more than they were supposed to, and the FSG and FSM students used it much less than they were supposed to. . . . With respect to oral language, the 'traditional' method was not as distinct from the 'functional skills' methods as would be desired for a clear-cut experiment" (Carroll, 1969, p.218).

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[1] Because of the scope of the investigation, this review can only describe the general outline and give main results. For details and fuller discussion the reader is referred to the full Pennsylvania reports, The Modern Language Journal, 53 (1969), Foreign Language Annals, 3 (1969). and Lindblad and Levin (1970), pp.8-17.

Comments in the reports give similar indications: "Field consultants observed students in TLM classes pronouncing the foreign language more than had been anticipated. While exemplary 'traditional' teaching has never excluded the spoken language, it was presumed to have been utilized less than it was in reality observed" (Smith and Baranyi, 1968, p.41).[2] "The area in which all three strategies seem to have deviated the most from expected norms was that of class time spent in student pronunciation of the foreign language. In the four 'traditional' classes both the teacher and student spoke the second language more than was expected. In the 'functional skills' strategies the students did not speak as much as might have been expected but were still rated as 'Good' to 'Fair' in the amount of time spent in speech production" (p.53). Valdman, finally, points out that "the most vulnerable aspect of the research is the establishment of the three teaching strategies and control of adherence to assigned strategies on the part of participating teachers" and that "the criteria are stated in sometimes vague and imprecise terms, and this makes evaluation of adherence to the particular strategy on the part of participating teachers difficult indeed" (Smith, 1969, p.123). Lange (1968, p.291) expresses a similar opinion.

Therefore, without playing down the significance of this important study, we believe that the design could have been substantially improved if a stricter distinction between the methods had been maintained. Imprecise distinctions in comparison studies necessarily diminish the chances of detecting true differences.

The following are the main findings after the first year of the study:

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[1] See Smith and Berger (1968), Tables 2-4, and Smith and Baranyi (1968), Tables 2-4 and 9-11.

[2] This remark was of course made with reference to the panel's definition of TLM, which did not leave much room for the spoken language. On the other hand, by prescribing "predominant use of the native language" in TLM, the panel may actually have created an untrue representation of traditional teaching methods as far as oral practice goes.

- The "traditional" students were superior or equal to "functional skills" students on all measures.
- The language laboratory system, used twice weekly, had no appreciable effect on class achievement.
- No "optimum" combination of teaching strategy and language laboratory system could be found.
- Female students achieved better results than male students. On a number of measures the difference was significant.
- "Traditional" classes proceeded more rapidly than "Functional Skills" classes.

The objectives were further investigated in the second year of the study, when twenty-eight new classes (700 students) participated in a replication study with the same experimental design as in the first year. The results confirmed the findings of the original study (see above). Further, fifty intact experimental classes (1090 students) received continued differential treatment with minor alterations in design. Some of the achievement tests, dating back to 1939-40, were replaced by more modern versions. Major results at the end of the second year were:

- The superiority of TLM was not as pronounced as after the first year. However, "traditional" classes scored significantly higher in reading and equalled "functional skills" classes in the other language skills.
- The language laboratory arrangements, used twice weekly, did not contribute measurably to learning.
- Student interest in language instruction declined throughout the study, independent of teaching strategy.

The experimental classes were observed for another two years under approximately the same conditions. After the third year the investigators concluded that the "traditional" students equalled or significantly exceeded "functional skills" students on the listening and reading tests. In the last year the number of experimental students left was naturally quite small (N = 92, i.e. 2 per cent of the original population). The summary of results reads: "Level IV (fourth year) results support earlier findings that there is no advantage favoring 'Functional Skills' classes in performance on tests designed to measure functional skills"(Smith, 1969,p.44).

As could be predicted, these somewhat startling findings gave rise to much controversy and a meticulous scrutiny of procedures and data. The most common critical arguments raised concern the measurement instruments, the lack of random assignment of classes to treatments, inadequate control of teacher performance, use of different instructional materials for the different groups, and the way in which language laboratories were used. Some of the points made in the discussion seem irrelevant, or even misplaced. Suffice it here to say that the crucial question is whether teaching strategies were accurately defined and adhered to. In our view, the provisions made for meeting requirements in this respect were not quite sufficient.[1] Distinctions between strategies were not clear enough and classroom activity did not seem to be under very strict control.

Still, in spite of some severe criticism, the Pennsylvania study must be regarded as one of the most significant pieces of research in language teaching in recent years. As Smith (1970) points out, its results "have far-reaching potential when interpreted cautiously and with proper qualification" (p.207).

Dušková and Benes

According to a résumé in Language and Language Behavior Abstracts[2] Dušková and Benes (1968) compared two methods of teaching Spanish based on the behavioristic and cognitive theories of language learning. In contrast to the audiolingual group the cognitive students were given exercises intended to develop conscious understanding of structural relations. The grammar was presented deductively, and all language skills were practised simultaneously from the beginning.

No important differences were found between the two treatment groups as regards listening comprehension and speaking. The cognitive group achieved better results than the audiolingual group in the reading and writing tests.

Chastain and Woerdehoff

The two major language teaching strategies outlined by Carroll (1965) were also put to the test in a comparative study at Purdue University in the academic year 1966-67 (Chastain and Woerdehoff, 1968). College students who took introductory Spanish were randomly assigned to audiolingual or cognitive treatment groups. In the audiolingual classes instruction concentrated on the manipulation of structural patterns, mainly in oral but also in written exercises. Grammar was taught inductively and the "natural order" of language skills was maintained. In the cognitive classes exercises were intended to develop conscious control of the language; grammatical structures were explained before practice. All language skills were practised from the beginning. The cognitive approach was not of a traditional kind. In fact, it was quite modern in that it involved a great deal of oral practice and very little translation. Instruction was given by two class teachers, who had to follow the rules and principles of the experimental methods in conducting the lessons. The groups used different textbooks.

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[1] Cf. the researchers' recommendation to the profession after the second year "That future research include more precise definitions of 'traditional teacher' and 'audiolingual teacher' based on detailed physical and verbal interaction analysis" (Smith, 1969, p.18).

[2] Vol. 3, 1969, p.1422.

For various reasons there was a considerable loss of subjects in the experiment, so that after one year of study only 99 students remained out of the initial sample of 169. However, t tests showed that there were no significant differences in background variables between the groups in the final sample.

Treatment effects were measured at the end of the second semester with four post-tests covering each of the four language skills. A number of analyses of variance were carried out for each of the skills.

The results of this study can be summarized as follows:

(1) Listening comprehension. There were no significant differences between the two methods. The direction of difference was toward the cognitive students.

(2) Speaking. Again no significant differences could be inferred between the two methods. The direction of difference favored the audiolingual students.

(3) Reading. The cognitive group did significantly better than the audiolingual group.

(4) Writing. All scores were in favor of the cognitive groups.

The investigators conclude that there is a clear tendency toward the cognitive code-learning theory. In fact, in a comparison between those students who had had no prior training in Spanish all the results were in favor of the cognitive method. The authors also draw the wider conclusions that deductive presentation of material is more effective than inductive and that analysis is more effective than analogy.

The achievement of those experimental students who continued the Spanish course in ordinary classes for the third and fourth semesters was measured in a follow-up study (Chastain, 1970). After the third semester the direction of difference was still in favor of the cognitive students, but at the end of the fourth semester all subjects seemed to have adjusted to the more neutral classroom practice, so that differences could no longer be noticed.

Casey

Casey (1968) investigated the relative merits of two approaches to language teaching (oral vs. conventional) used in Finnish secondary schools. On the basis of the results of a Methods Profile questionnaire, a number of "extreme method" teachers were identified. Fifty students who had studied under these teachers were then matched and paired on a number of variables, such as language proficiency, age, sex, "year-hours" of instruction in English, and foreign travel. A series of proficiency tests, constructed by the investigator, were then administered.

On the oral test battery, "oral" students recognized more phonemic distinctions, had somewhat better pronunciation, and constructed more complicated oral dialogue than "conventional" students. The differences were not statistically significant. The "conventional" students did better on the test of fluency and on the translation tests. In the latter case the difference was significant.

These results should be interpreted with some caution. Several variables are not under experimental control and the crucial methods scale does not seem to be very reliable.

Mueller

Yet another empirical study with the aim of evaluating two teaching methods based on the audiolingual habit theory and the cognitive code-learning theory has recently been reported by Mueller (1971). The experiment involved five different two-semester French courses at the University of Kentucky, three of which were taught according to audiolingual principles and two according to cognitive code-learning principles. Three lessons a week were given, plus a weekly lecture. The lessons were taught by graduate assistants with no prior teaching experience, while the lectures were given by the investigator. The investigator also visited the lessons, held regular meetings with the assistants, and administered all tests. Teaching in the cognitive courses placed more emphasis on explanations, writing, generation--rather than manipulation--of sentences, and on exercises which contrasted sentence patterns, than did teaching in the audiolingual courses.

Achievement was measured at the end of the second semester by means of the MLA Cooperative Tests. Main results are reported in the table:

MLA Cooperative Test Results (Mean Scores)

		Listening	Reading	Writing
Audiolingual Courses	1	17	24	50
	2	21.2	24.2	46.4
	3	18.7	28	-^{x}
Cognitive Courses	1	27.2	29.3	62.6
	2	24.5	28.8	64.5

(^{x} Missing score)

The cognitive courses achieved significantly higher mean scores than the audiolingual courses. Differences within treatments were smaller than differences between treatments.

The attrition rate was significantly higher in the audiolingual courses than in the cognitive courses.

Thus the main finding of the Kentucky experiment was that cognitive code-learning courses produced better learning and higher motivation.

Wide conclusions cannot be drawn from this experiment. Several factors other than treatment may have influenced the outcome. All courses did not use the same textbooks.[1] There was no very close check on what kind of learning activities the students actually engaged in. The role of the inexperienced teachers is also uncertain.

It should further be made clear that there was no very distinct differentiation between the teaching methods. Pattern drills were, for instance, recommended as homework to the weaker students in the cognitive courses, and explanations occurred in the audiolingual classes.

2.3 Specific Comparisons

The studies dealt with here investigate specific aspects of second language learning. They center mostly around the problem of how best to teach grammatical correctness and the particular problem of whether structure drills are adequate means for that purpose. Some attention has also been devoted to experimental findings with bearing on arguments in the recent national discussion on methods in Sweden.

McKinnon

The use of patterned structure drills in current methods of language teaching derives more from language analysis than from psychological and pedagogical investigation. Linguists, and notably structural linguists, who were not necessarily experts on teaching, exerted an influence on language teaching methodology that was, before the breakthrough of transformational grammar, never seriously questioned. During the sixties there was, however, increasing doubt concerning the soundness of assumptions implicit in contemporary teaching methods, and various attempts at finding empirical evidence one way or the other were made.

McKinnon (1965), for instance, found no empirical support in the literature for the widespread use of pattern drills as a practice method. In order to test their basis he launched an experiment with grade III children in which three independent variables were introduced: practice by three different methods (3 levels), inductive vs. deductive procedure (2 levels), and organization of materials (2 levels). The language taught was a simplified pidgin of New Guinea called Police Motu. Practice by Method One in the first variable consisted of imitation of recorded sentences, arranged in a typical pattern practice sequence. For Methods Two and Three the children were, in addition, provided with pictures representing the meaning of the sentences ("visual referents").

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[1] However, the difference was the same when audiolingual and cognitive courses using the same textbooks were compared.

Method Two children also imitated the model sentence (prompting technique), while Method Three children attempted to formulate the correct utterance before hearing the model sentence (confirmation technique).

The procedure variable is of immediate relevance to the aims of the present study. In the inductive presentation children practised without any grammatical clarification of sentence structures, whereas in the deductive presentation structural features were pointed out and explained in connection with practice.

In the material variable regular substitution of new vocabulary words in the drills contrasted with varied substitution. Since organization of teaching material is not a direct consideration in our study, we shall not go into detail on this point.

Nine experimental lessons of fifteen minutes each were administered to 120 children individually. After the last lesson five criterion tests were given, consisting of both recognition and production tasks. Pictures were used in three of the tests, which presumably favored Method Two and Three children somewhat since they had about twice as much practice with pictured sentences as Method One children. To avoid teacher influence the teaching material was presented by means of a Language Master recording device into which cards could be inserted. On the cards there was a tape strip on which the practice sentences had been recorded. The pictures used in the experiment were also drawn on the cards.

The criterion test results showed that the magnitude of method means was always in ascending: Method One, Method Two, Method Three. On almost all measures Method Three was significantly superior to Method One, and on many measures it was also superior to Method Two. Vocabulary was best learnt by Method Three; 80 per cent of Method Three children attained full mastery of the new vocabulary, as against 45 and 51,5 per cent for Methods One and Two respectively.

The deductive procedure had a marked beneficial effect on performance when used with Methods One and Two but made no difference with Method Three.

Overall, then, the confirmation technique in combination with "visual referents" was the most effective method with this category of learners. The other major finding of interest was that children as young as 8 - 10 years can benefit from grammatical instructions.

The author´s recommendation to the profession is that "teachers who use methods one and two for practice can improve performance by using a deductive procedure" (p.132).

Lim

McKinnon's findings inspired Lim (1968) to set up an experiment to investigate further the effects of prompting and confirmation techniques in the learning of grammar. Other objectives were to investigate the effects of pictures versus translations and to study the effects of two different explanation-practice sequences: deductive and inductive procedure. The latter term is almost a misnomer here; the procedure referred to was at least "semi-deductive" in that half of the practice was given after the explanation.

The experimental design was similar to McKinnon's: the lessons were administered to 144 grade III children individually with the aid of a Language Master recording device; teaching comprised four Malay sentence patterns; duration of experimental schedule was two weeks; the required vocabulary was learnt before the experiment.

The direction of results for the prompting-confirmation variable confirms McKinnon's findings: the confirmation practice technique produced significantly better results on progressive learning, final vocabulary and both the production tests.

No main effects were found on the procedure variable, which may be attributed to a contamination of induction and deduction principles. The difference between inductive and deductive procedures was obviously too small to bring out any measurable effects. The author is well aware of this: "If one considered the procedure in terms of the duration of practice after the instructions were given, there was a difference of only four minutes between the procedures. In the deductive procedure, instructions were given at the beginning of eight minutes of practice or four minutes before the end of the practice. Also, in the review sessions the learners were reminded of the rules for the respective patterns before the practice, and the scores for number of times practiced included the learning as well as the review number of times practiced. This means that the distance between the two procedures is further reduced" (pp.130-131). The comparison was really between two kinds of deductive procedure rather than between deductive and inductive procedures.

The picture-translation variable produced no significant differences.

Torrey

Torrey (1966) compared a "traditional" and a "drill" technique in the learning of word order in Russian and found that subjects trained exclusively with pattern drills could translate sentences from written English to spoken Russian faster and more accurately than subjects trained with vocabulary plus grammar rules only. Drill subjects showed greater ability to imitate spoken Russian and performed better on a cloze test, where appropriate words were to be chosen to fill blanks in incomplete sentences. In a Russian-to-English translation test there were generally no significant differences.

A few comments seem in order. Firstly, the results should be evaluated on the basis of the following assumption, made by the investigator (p.2): "According to one view grammar learning consists of understanding and remembering the formal descriptive rules for the formation of sentences. It should follow that a person who knew these rules and knew the words would be able to speak and understand the language with no further practice required" [emphasis added].

The "rule" lessons were devised accordingly, i.e. with practically no application exercises. The decision to pit this rather odd approach to language instruction against a modern teaching technique probably rests on a misconception. However inadequate traditional teaching methods were from the functional skills point of view, they did certainly allow practice of rules, notably in translation exercises. In his review of the study Carroll (1966) points out: "The experiment does not really contrast a traditional grammar-translation method with an audiolingual [one]; instead, it contrasts practice in sentence construction with no practice in sentence construction" (p.20).

Secondly, a closer look at the experimental procedures reveals a number of sources of error that must be taken into account for a sound appraisal of the findings. Total learning time differed between the groups; it was substantially longer for the drill group (Table 2). The groups also used different types of teaching machines. All subjects, including the drill students, were given one and the same grammar lesson before training (p.27). The basic achievement test consisted of English sentences to be translated into Russian "which closely resembled those used in demonstrations and in the drill training" (p.35).

"It seems", says the author in the Summary, "safe to conclude that our experimental test has shown that a pattern drill method of learning grammar produces greater skill than is reached without such drill and that the habits thus acquired resemble in several ways those of the native language."

Wohl

A study by Wohl (1967), conducted in Ecuador, was designed to investigate the value of transformational grammar in the teaching of a second language. Two groups of girls, aged twelve to fifteen, were given 42 English lessons, each containing a short dialogue, vocabulary, and a grammar frame. The experimental group was also given a transformational analysis of the grammar pattern being practised, in addition to the regular grammar frame studied by all subjects. Both groups were together during experimental lessons, except when the experimental group was given the short transformational analysis. The lessons were taught by the investigator "in order to eliminate the variable of 'teacher performance'" (p.3).

Four post-tests were administered. There was little difference between the groups in the early post-tests. Post-test 4 resulted in a marked but insignificant difference in favor of the experimental group.

The difference in treatment between the groups was probably too small to result in any measurable main effects. The transformational analysis in the experimental group lasted only from one to three minutes, while the entire lesson averaged 43 minutes.

The author´s conclusion is that "the results of this study must be considered inconclusive" (p.16).

Xiem

In a small-scale experiment carried out by Xiem (1969) to determine the importance of structural explanation in learning a foreign language twenty undergraduate students were divided into two treatment groups matched for language ability by means of a language aptitude test. They received instruction on Vietnamese grammatical structures in eight thirty-minute lessons. In the experimental groups the subjects studied a written explanation for five minutes prior to practice and drill--but after contextual presentation of the structure--whereas the control group had no clarification but instead were given additional practice for the corresponding period of time. In all other respects treatment was the same in the two groups. The experimental lessons were prepared and taught by the investigator. The subjects had no prior knowledge of the target language. After the training phase two achievement tests consisting of recognition and production subtests with oral stimuli, were administered, one immediately after the last lesson and one after an interval of twelve days (retention test). In the production tests the subjects were instructed to form new sentences after hearing stimuli in the target language and in the recognition tests they were to judge "grammaticalness" in a number of sentences. There was also a vocabulary test in which the subjects were asked to write the English equivalents of eighteen Vietnamese words presented orally.

The achievement test scores showed that there was no difference between the groups in vocabulary acquisition. In the other achievement tests there was a consistent trend in favor of the experimental group. In one case the difference was significant.

Summary of Mean Scores

	Achievement Test 1			Achievement Test 2 (retention)		
	Experimental group	Control group	Difference	Experimental group	Control group	Difference
Vocabulary	23.1	23.3	-0.2	23	22	1
Recognition	45.6	44.2	1.4	44.8	40.7	4.1 (sign.)
Production	42	38.2	3.8	40.4	37.1	3.3

It should be kept in mind that the population was very small (N = 20), and that the teacher variable was not strictly controlled. As the investigator taught the experimental lessons himself, there is the theoretical possibility that personal bias might have influenced the results.

Tucker, Lambert, and Rigault

Tucker, Lambert, and Rigault (1969) investigated the importance of external direction in the learning of gender distinctions in French nouns. Four experimental groups of university students were given eight sessions of vocabulary training which aimed at the active mastering of some 160 items. In one of the experimental groups, comprising two classes, the teacher focused the students' attention on the significance of the endings of the nouns (explicit training), while in another group (also comprising two classes) the subjects were left to discover the morphological regularities by themselves (implicit training). The two groups had the same amount of teaching and training. The results of this study indicated that vocabulary training on French nouns is more effective if the learner is given explicit information about certain characteristics (e.g. endings) that provide cues for gender distinctions. The groups which did not have such formal features pointed out to them did not significantly improve their ability to make gender assignments.

The GUME Project

Extensive experimentation in the GUME project showed that there was no difference in learning effects between the following three approaches to teaching: Implicit method (grammar taught through pattern drills without explanations), Explicit-English method (pattern drills in combination with explanations in the target language), and Explicit-Swedish method (pattern drills in combination with explanations in Swedish).[1] The methods will henceforth be referred to as Im, Ee, and Es, respectively.

In the first year of study a total of 54 grade VII classes, or 1011 pupils aged 14, were given differentiated instruction in three parallel experiments, identical in design. Three grammatical structures were taught: the do-construction (Lindblad, 1969), the some-any dichotomy (Carlsson, 1969), and the passive voice (Olsson, 1969). The experimental lessons differed only with respect to the explanation variable; approximately 75 per cent of the lesson was exactly the same for the three methods. To avoid the variable of teacher performance all lessons were recorded in advance and presented by means of tape recorders.

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[1] The GUME studies have been described in detail in the reports quoted. This review will only summarize briefly general outline and main findings.

The data were subjected to thorough statistical analysis, including a series of analysis of variance and covariance. As indicated, differences in progress scores between the three treatment groups were generally small and showed no consistent trend.

In the second year two more field experiments were undertaken with minor alterations in design. In GUME 4 (Lindblad and Levin, 1970) the number of experimental lessons was increased from 6 to 12; the time for explanations in Ee and Es was shortened from 25 to 20 per cent of total lesson time. The rest of the lesson--approximately 28 out of the 35 minutes of actual teaching time--was the same for the three methods. Grade VI pupils were used as subjects (N = 577). Various grammatical structures were taught.

Again the three methods yielded equal learning results; in all analyses differences were insignificant. No interaction effects were found between intellectual ability and teaching method.

The GUME 5 follow-up experiment (Levin and Olsson, 1971) taught the passive voice to grade VIII pupils (age level 15 years). Methods were not markedly differentiated: 85-90 per cent of the teaching was identical in the three series. The explanation variable was introduced for approximately 4 minutes in each 30 minute lesson in the Ee and Es groups.

No results that can be easily interpreted were obtained. In the main the outcome paralleled earlier findings; one significant difference was found--Es superior with pupils taking an easier course--but according to the authors this difference "should be interpreted with the utmost care" because of limited and "grossly unreliable" progress scores (pp.122-123).

The overall picture from the GUME 1-5 studies, then, is that the three teaching strategies used resulted in equal learning.

The UMT Project

Another Swedish research project dealing with methodological problems is the UMT project in Malmö.[1] In one experiment (Lindell, 1966) beginners of German (aged 14) were taught the present tense of sein according to direct method practice, i.e. with no grammatical analysis, translation, or comparison with the native language, but with varied and plentiful oral exercises of both the imitative and productive kind. The training phase, consisting of five lessons, was given in language laboratories; 65 students took part in the experiment. Prior to the pre-test there were a few short introductory presentations of the structure.

Although the instructional programs are reported to have functioned very well with almost ideal correct response rate, only moderate progress was noted. The mean gain on the criterion measure was 1.19 points. One calls to mind the disappointing results of the Pennsylvania study, although it is very likely that neither study fully exploited the potentials of the language laboratory.

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[1] UMT is short for Undervisningsmetodik i Tyska (= Methods of Teaching German).

Because of the modest results attained in the language laboratory, a continuation lesson utilizing a grammar-translation method was given in two of the classes. The lesson consisted of conventional classroom instruction with practice based on translation and comparison with the corresponding Swedish structure. After the lesson the post-test was again administered (post-test 2). The mean progress score for the 32 students after this single lesson--i.e. the difference between post-test 1 and post-test 2--was 4.69 points.

It is hazardous to draw conclusions from this experiment, especially since there was no control group, but it seems reasonable to assume that the main factor contributing to the improved score is better cognitive control of the problem. Language laboratory training alone, without proper classroom preparation, does not ensure satisfactory learning results, not even with comparatively young students and simple syntactic problems.

Other investigations conducted in the UMT project merit attention. Here we can make only brief mention of some results that can be related to the recent debate on language teaching.

Löfgren (1966), studying vocabulary training at the intermediate level of German, found bilingual word-lists--with translation of the glosses into the native language--significantly more effective than monolingual word lists.[1]

Hall (1969) investigated teacher experience and attitudes on the basis of a questionnaire. Opinion among the 100 teachers in the sample tended to be toward the negative on monolingual word lists and on the contrastive approach to teaching. Student attitudes toward twenty-one specified activities in foreign language lessons were studied by Magnusson (1968). Grammar and German-to-Swedish translation were rated as the most useful and chorus reading and songs as the least useful. Work in the language laboratory and songs got the highest and "Kettenfragen" (e.g. Frage Karl ob er krank ist) and grammar got the lowest ratings on the list of "enjoyable" activities. Grammar was thus considered useful but dull by these fourteen-year-olds. They found singing enjoyable but of little practical use.

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[1] A later experiment by Parent (1969) similarly resulted in significantly better learning for students using bilingual reading materials over students using monolingual materials. Dodson (1967) found that sentence-meaning can best be acquired and retained by means of the mother tongue. Use of the mother tongue did not have a detrimental effect on performance during imitation exercises.

Crothers and Suppes

Determining the role of translation in second-language learning was also the objective of very carefully controlled studies by Crothers and Suppes (1967, Experiments XV and XVI). They found that translations facilitated language acquisition slightly, and that translation training on isolated words is more beneficial than training with complete sentences.

The very complex experimental design does not allow a detailed account of the studies. Because of the strict experimental setting it is moreover uncertain as to whether the results are valid under normal classroom conditions.[1]

Sjöberg and Tropé

Sjöberg and Tropé (1968) compared a traditional deductive method of teaching grammar with an inductive "discovery method". The grammatical structure to be learnt was preposition followed by ing-form of the verb (which, incidentally, was one of the structures taught in our experiment). Forty-five matched pairs of sixth grade pupils (aged 13) were randomly assigned to the two treatment groups. In the deductive group the teacher gave an explicit verbal exposition of the rule, which the students were then to apply in exercises. The inductive group had exactly the same exercises, but no verbalized rule. The teaching material was also the same in the groups. Tests of IQ, achievement and retention were administered. The results favored the deductive group and the differences were significant in the immediate achievement tests. The tendency prevailed in the retention test five weeks later, but the difference was not significant.

No interaction was found between intelligence and achievement in the deductive group. The same calculation was not made for the inductive group.

The subjects were also tested on new items in order to assess positive and negative transfer effects. The deductive group were better able to apply their knowledge correctly in sentences that had not been practised in the experimental lessons, but they also exhibited a greater proportion of incorrect applications of the rule. But, as the investigators point out, this particular comparison is not really valid as the groups had not reached the same stage of initial learning. The tendency to use the rule indiscriminately, as well as the positive transfer effects, might have been equally strong among inductive and deductive students had they attained comparable learning results.

Krámský

Unfortunately the original documents of a Czech experiment, reported by Krámský (1970), were not available to us at the time of writing. This résumé is quoted from Language and Language Behavior Abstracts.[1]

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[1] See also p.2:22

The experiment sought to demonstrate the advantages of pattern drills over traditional teaching with grammatical rules. A group that had been taught by pattern drill retained sentence structure better than a group that had learnt by means of grammatical rules. Better contact between teacher and students was established in the pattern drill group.

Politzer

A fundamental question in the teaching of grammar concerns the problem of the optimal sequence of explanation and practice. To simplify the discussion here we shall make a rough distinction between early and late explanations, i.e. with reference to their placement in the practice sequence. Arguments for late explanations of the structure being practised can be found in psychological theories of learning: "It has for some time been a well-seated tenet of the psychology of learning that a student more readily learns and more persistently retains what he has discovered for himself. If we accept this principle--and we have no reason not to--we must also apply it to the discovery of language structures by the student" (Barrutia, 1966, p.159).

Barrutia also presents arguments for early clarification referring to teachers advocating this strategy: "If we wait," say those teachers who favor giving the rule first, "until the end of a drill to explain what has been happening, we will have lost the benefit of a focal point while the drill was in progress. The student has no particular structure in mind to concentrate on while he practices. Success is extremely important and the student is immediately successful when he has been given the grammatical element involved, because he can then fix his attention on it, confirm the rule, and be satisfied that he has learned it" (Ibid.).

These conflicting theories of grammar learning reflect the old polarization between advocates of inductive, analogical teaching, seeing language learning as a matter of acquiring a set of automatic verbal habits, and advocates of deductive, analytical teaching, viewing effective second language learning as a mental process requiring cognitive control of formal language properties.

Politzer (1968) tried to find empirical evidence in answer to this basic question. He conducted an experiment in which eight First Year classes of French and Spanish at the High School level were given four different treatments with the explanation as the only independent variable.

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[1] Vol. 4, 1970, p.1622.

Treatment A The explanation preceded practice.

B The explanation was given after an introductory presentation of the structure.

C The explanation was given after all practice.

D No explanation was given. Instead there was correspondingly more practice.

Practice consisted of various kinds of drills, recorded by native speakers. The explanations were also recorded. Treatments were rotated among classes and patterns in order to counterbalance any chance influence on performance. Thus, one and the same class alternated between treatments for the different patterns. This was made possible by the administration of a post-test after each pattern (6 French and 6 Spanish).

Analysis of covariance with language aptitude as a covariate was used in the analysis of treatment effects. Treatment ranks, calculated for each of the twelve patterns, can be summarized as follows:[1]

Spanish Classes

		Rank			
		1	2	3	4
Treatment	A	3	1	0	2
	B	1	1	3	1
	C	1	4	1	0
	D	1	0	2	3

French Classes

		Rank			
		1	2	3	4
Treatment	A	3	1	2	0
	B	2	1	2	1
	C	0	0	1	5
	D	1	4	1	0

If we add up the results of the two experiments in one table and assign a 4,3,2, or 1 point value to each rank from 1st to 4th we obtain the following comprehensive summary of results (point value sums within parentheses):

		Rank			
		1	2	3	4
Treatment	A	6 (24)	2 (6)	2 (4)	2 (2)
	B	3 (12)	2 (6)	5 (10)	2 (2)
	C	1 (4)	4 (12)	2 (4)	5 (5)
	D	2 (8)	4 (12)	3 (6)	3 (3)

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[1] The tables have been adapted from the original report.

The mean of point value sums for training with explanations (Treatments A, B, and C) is 30.3. For training without explanations (Treatment D) the sum is 29.0. The table also indicates that an early explanation is more effective than one delayed till after main practice.

To condense the main results even more, let us consider only 1st and 4th ranks between early (Treatments A and B) and late --or no--explanations (Treatments C and D):

	Rank	
	1	4
Early explanations	9	4
Late explanations	3	8

The same calculation for Treatments A and C brings us to the very center of the question of whether explanations should be introduced prior to or after main practice:

	Rank	
	1	4
Treatment A (Early explanations)	6	2
Treatment B (Late explanations)	1	5

The conclusions one can draw from Politzer's study is that it is not to the best advantage to introduce explanations after functional practice with patterns. Or, in the words of the investigator, "prolonged withholding of explanation (or complete absence) seems at least a fairly doubtful practice" (p.330). This view, by the way, seems to reflect a change of opinion. Earlier Politzer has stated that "rules ought to be summaries of [the student's] behavior" (1960, p.6).

Crothers and Suppes

Crothers and Suppes (1967) investigated morphology learning for the same purposes (Experiment XIV). Subjects were to learn the correct conjugation for the present tense of Russian verbs in two-word sentences according to different rule-example sequences. Subjects who were presented with the rule early in the sequence achieved a higher proportion of correct responses in the test phase than subjects who were given the rule after presentation of examples.

Berkenkamp

Results reported by Berkenkamp (1969) corroborate the findings by Politzer and Crothers/Suppes. She made an investigation of the order of presentation of grammatical analysis in relation to classroom practice. Two equated groups of twelve college students were taught five grammatical structures of Amharic (the national language of Ethiopia) with written explanations and oral class drill. An experimental group had the explanation after initial presentation of the structure (but before practice), and a control group received the explanation only after they had practised the structure in class, i.e. at the end of the lesson. The experimental variable was the position of the explanation; everything else was common to the two groups. The instruction consisted of four one-hour lessons. Achievement was measured the day after the last lesson and again eight days later. Both aural recognition and oral production skills were tested.

The test results consistently favored the experimental group. In some of the comparisons inter-group differences were statistically significant. The differences were smaller on the retention test.

The investigator concludes that the results seem to show that grammatical analysis given at the initial stage of practice facilitates learning more than analysis given at later stages.

Werdelin

The effects of inductive and deductive strategies in teaching have also been studied in other disciplines, but the findings cannot automatically be applied to second language learning. We need to know more about the correlation between the learning of a language and other kinds of learning before valid inferences can be made.

Werdelin (1968a), investigating the learning of a mathematical principle, found that directed learning, i.e. with presentation of the rule before practice with examples, was superior to discovery learning with examples only. However, discovery learning resulted in somewhat better transfer and retention.[1]

A parallel experiment which investigated the learning of a foreign alphabet (Arabic) in fifteen-year-olds gave very much the same results (Werdelin, 1968b). The students who were told the principles of the alphabet before application to examples performed better on the test measuring learning immediately after the experiment than the students who had learnt by examples only. The latter students did comparatively better in the tests measuring transfer and retention.

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[1] A study on the learning of mathematics by Haslerud and Meyers (1958) also resulted in better learning with an inductive method. Rizzuto (1970) reports similar results for the learning of grammatical concepts in the native language.

2.4 Conclusions

Our search of the literature has revealed that there is a scarcity of conclusive comparative method studies on grammar learning, especially with adults at the elementary level. Only little research has been done with beginners above college age.

A number of studies carried out at other age levels have been reviewed. Most of them can only be related to our problem with uncertainty, as it is difficult to ascertain to what extent the findings can be generalized to our category of learners. There is as yet no common agreement as to how learning conditions change with advancing age.

Several of the studies reviewed would probably have yielded more conclusive results if the teacher variable had been effectively controlled, for instance by the use of pre-recorded lessons. It seems very difficult indeed to keep the performance of the live teacher in an experiment under satisfactory control.

Another weakness that many studies have in common is a lack of clear differentiation between treatments. In several cases the difference between teaching methods tested has been small and inadequately defined.

Experimental design, methods, and aims were, furthermore, rather diverse and difficult to compare. However, the accumulated results seem to allow a few tentative conclusions:

(a) Habit-forming vs. cognitive methods (audiolingual vs. traditional methods). Broad comparisons, measuring general language proficiency gain, have not demonstrated unquestionable superiority for any particular teaching strategy. Smith (1969), Chastain and Woerdehoff (1968) and others have found cognitive methods somewhat more effective than audiolingually oriented methods. The preference for strict audiolingual practices often found in curriculum recommendations seems difficult to justify on the basis of available research results. According to Grittner (1969b) "most research on the effectiveness of the audiolingual method versus the older teaching strategies, has shown either no significant advantage for the audiolingual approach or else the results have actually favored traditional or eclectic strategies" (p.474).

(b) Analysis vs. analogy (explanations vs. no explanations). There is strong evidence that the analytical approach to grammar teaching is more beneficial than the analogical approach. Apparently functional practice in a second language becomes more effective if combined with structural explanations and clarification (McKinnon, 1965; Lindell, 1966; Chastain and Woerdehoff, 1968; Politzer, 1968; Sjöberg and Tropé, 1968; Dušková and Benes. 1968; Xiem, 1969; Tucker, Lambert and Rigault, 1969).

(c) Deduction vs. induction. The relative merits of inductive and deductive procedures need to be further investigated, according to many experts. Crothers and Suppes (1967) point to the fact that "phycholinguistic investigations of grammar learning have been almost exclusively preoccupied with inductive learning rather than with deductive learning" (p.220). Lewis (1970) finds a reason for this state of affairs: "Because of the general acceptance of the structuralist/behaviorist models research into second language acquisition until recently, has been largely colored by inductive presupposition, so that the relative merits of the two alternative models in respect of inductive-deductive approaches have not been assessed" (p.69). Grittner (1969a) is rather sceptical of the value of inductive grammar learning: "In the final analysis, it appears that the inclination toward the inductive process for learning generalizations is based more upon the belief that it is an important educational experience in itself rather than upon any proof that it is conducive to better learning of the language skills" (p.154).

The investigations quoted under (b) showed that language training with deductive presentation of explanations is generally more effective than inductive presentation. The more specific studies by McKinnon (1965), Crothers and Suppes (1967), Politzer (1968), and Berkenkamp (1969) also demonstrated that early explanations are somewhat more powerful than late explanations. Therefore one can cautiously conclude that deduction is a better principle than induction in second language learning, at least with adolescents and adult learners.

(d) The role of the native language. Discriminate use of the mother tongue for explanations and comparison with the target language has not been shown to cause detrimental effects on learning. Several comparative studies have come out in favor of the method making use of the native language (Smith, 1969; Chastain and Woerdehoff, 1968; Lindell, 1966). Löfgren (1966), Dodson (1967), and Parent (1969) found that bilingual materials were more effective than monolingual materials.

(e) Structure drills (pattern practice). Discrete studies on the effectiveness of structure drills seem, on the whole, to indicate that their value as a practice technique has been somewhat over-estimated (McKinnon, 1965; Lindell, 1966; Politzer, 1968; Xiem, 1969).

(f) Prompting vs. confirmation. The confirmation technique, which involves the learner attempting to answer before hearing the correct alternative, seems more effective than the prompting technique--imitation of correct responses--as the studies by McKinnon (1965) and Lim (1968) suggest.

This interpretation of research results seems reasonably valid for learners older than fourteen or fifteen. For lower age levels the significance of the findings is somewhat more uncertain, although a great deal of the evidence presented would, in all probability, apply to learners as young as 10 - 13 years. However, most of the problems considered need much further elaboration and investigation before anything like a tenable theory of the learning of grammar at different age levels can be formulated.

CHAPTER 3

THE EXPERIMENT

3.1 The Pilot Study

Since we were not sufficiently familiar with the practical realities of the field that we were going to investigate, some exploratory experimentation was called for. In the spring term 1970 two regular evening classes of the Gothenburg Municipal Secondary School for Adults (henceforth, the School for Adults), comparable to the final experimental population, were selected for a pilot study with the objectives of trying out teaching materials and tests, and of finding out average proficiency in English and the approximate proficiency range. Other objectives were: to estimate the optimal amount of instruction which could be put into a lesson of forty minutes, and to get acquainted with the experimental lessons. About fifty students participated.

First-version teaching materials and tests were tried out in a number of lessons (7 IM and 7 EX lessons), technical equipment was checked, and a provisional attitude test was administered. Important observations on practical details were made, especially on timing and pauses. The achievement tests were analysed and a number of too easy and too difficult items were cut out, but the bulk of original test items could be retained since they discriminated well. Adequate testing time was assessed.

The questionnaire showed that the students´ attitude toward the experimental lessons was favorable and that they were slightly more positive toward the EX lessons. Some popular features were: the pictures and other visual referents--projected on a screen--which accompanied explanations and drills, the dialogues, the explanations, the written exercises, the variation in pedagogic techniques, and the tests. Negative opinions were expressed on too large a vocabulary, too little time for proper treatment of lesson material, and too brief pauses for written work. Workbooks were collected after each lesson to be checked and this also caused some dissatisfaction.

As a consequence of the pilot study the experimental design had to be altered somewhat. The quantity of instruction had to be reduced, because we had slightly misjudged the capacity of the students. Also it was decided not to engage other teachers for the experimental groups as originally planned. After consultations with experts and school administrators it was decided that all the experimental classes should be taken charge of by the investigators themselves. This made for easier planning and better experimental control of the teacher variable.

The critical feature of the IM lesson series was the pattern drills, and here too certain adjustments were necessary, especially as to the length of pauses. The importance of good loudspeakers and first-rate sound quality was apparent.

After the study progress on the achievement tests was calculated, but there was no reliable indication as to which of the two treatments was most effective.

Thus we found no clue to the superiority of either method in the actual results which came out, but more importantly, we gained invaluable experience for the final investigation.

3.2 Schedule

3.2.1 The Regular Course

Apart from the experience gained from the pilot study, the scope and some procedures of the experiment had to be dependent on certain requests from the administration of the school whose courses and students we used for experimental purposes. Since the experiment was to be carried out within a course of elementary English offered by the School for Adults, the administrators were anxious that experimental activities should not interfere with the curriculum and normal proceedings of the course.

The course itself, which will be referred to as "the regular course" hereafter, is a 15-week 60-hour course in which students meet twice a week for a double session. One session lasts for 40 minutes. There is an additional session every second week for each half of the class to be used for activities especially effective in smaller groups, e.g. pronunciations exercises. The level of the course will be described in detail in section 3.3.1.

It is the policy of the school that the curriculum of parallel classes is well coordinated, and the same course book is used by all teachers teaching at the same level. However, each teacher is free to use additional material, such as exercise books and various teaching aids of his own choice. Therefore, it was decided that the experimental lessons would serve as such additional material. As for the dimensions of the experiment, it was agreed upon that the lesson series should be limited to ten 40-minute lessons, and that the administration of the various tests should not exceed another ten lessons. There was good reason to believe that the curriculum of the regular course could be covered successfully during the rest of the course.

Apart from these quantitative aspects, the school administrators also expressed a wish that the experimental activities should not be of such a nature as to give the students a feeling of being involved in time-wasting or meaningless activity, which in all likelihood would increase the drop-out rate.

3.2.2 The "Special Course"

An important matter that had to be settled was whether or not the students should be told that they were going to be involved as subjects in an experiment. Both arrangements seemed to have advantages and disadvantages. Informing them frankly about the experiment would certainly have caused the investigators to feel more at ease and would probably have resulted in better understanding from the subjects with regard to the numerous tests they had to take throughout the term. However, it is well known that there is considerable aversion toward serving as guinea-pigs, especially in the case of adults. The risk that students would start dropping out before the experiment even started or that they would cut experimental classes had to be seriously considered. Another disadvantage may have been that being aware of the experiment the participants would have felt a psychological stress during lessons and tests, which might have affected results. In the end it was decided not to tell the students about the experiment. Therefore, the experimental material was entitled Special Course in English for Adult Learners, and it was hoped that the students would participate in the experiment in as relaxed a manner as in the rest of the course.

The disadvantages of this arrangement were quite apparent to the investigators, who experienced slight apprehension on administering some of the final tests. Nevertheless, the investigators feel they had made the right decision: the students seemed to accept the Special Course at face value even though they showed signs of annoyance at being tested so excessively. By implying that the tests were necessary for the evaluation of the Special Course, all evaluation instruments were eventually administered without difficulty or trouble.

3.2.3 Experimental Schedule

After our final plans had been sanctioned by the school administration, the experimental lessons and the various tests were scheduled according to Figure 3.1.

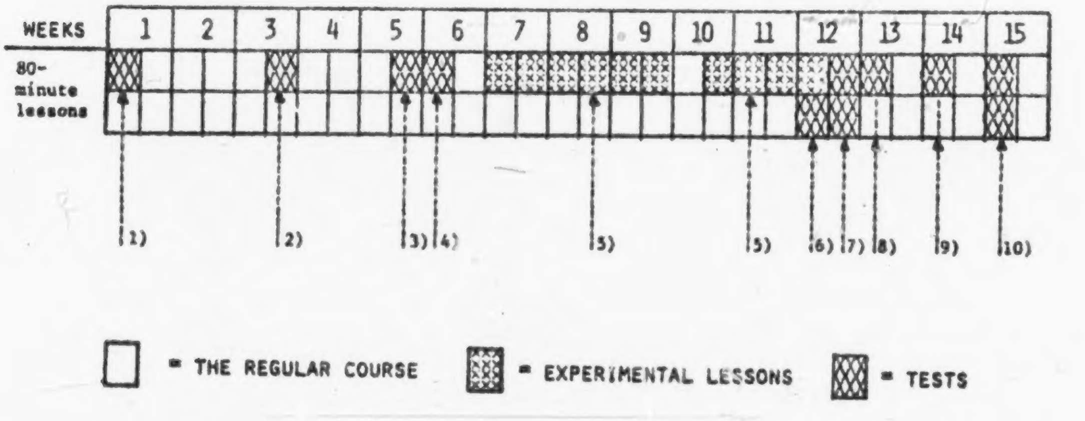

Figure 3.1 Experimental schedule

1) Proficiency Test; 2) PACT (Pictorial Auditory Comprehension Test); 3) Pre-test: Part A of the Achievement Test; 4) Pre-test: Parts B and C of the Achievement Test; 5) Experimental lessons 1-10 6) Attitude Test; 7) Post-test: Parts A, B, and C of the Achievement Test; 8) Oral Test; 9) Verbal Aptitude Test; 10) Term Test

Figure 3.1 does not include the additional sessions in half groups mentioned before. The gap between experimental lessons 6 and 7 is due to an official holiday on November 2 cancelling Monday classes. Therefore it was decided that no experimental lesson should be administered on corresponding Tuesday classes either. Instead these class meetings were used for administering the previous experimental lesson to those who had happened to miss it. Although the correctness of this procedure may be questioned, we found it justified on the following grounds: with regard to the small sample the full participation of every subject in experimental activities was of great value; the lesson was administered under the same conditions as otherwise though on another occasion; finally, this exceptional measure involved only a few students.

The figure also reveals that whereas the Achievement Test battery was split and administered on two occasions as a pre-test, it was given in just one lesson as a post-test. The main reason for this was that the rather substantial Achievement Test would have been too fatiguing if given in its entirety before the experimental lessons, the more so as it contained material that was practically unknown to them, whereas after the lessons the test must have been much easier to do because the students were more familiar both with the structures tested and with the test itself. Besides, instructions could be made shorter the second time, and therefore the whole test could be fitted into one class meeting more easily. There was, of course, a break between Part A and the rest. Still another reason was that by that time there were only few class meetings left before the end of the term, and other tests were still to be taken.

The scheduling of the Aptitude Test deserves a few words, too. It probably seems more natural to administer a test like this before the experimental lessons, even though it makes little difference when such an independent variable is being measured. Since the test could easily be identified as an intelligence test, it was feared that some of the more sensitive students might be discouraged from participating in the course. Also on this point we were asked by the school administrators to proceed with the utmost care and tact, and therefore we had to be prepared to cut out the test if necessary rather than risk causing an unpleasant atmosphere in the classroom. As it happened, there were no objections to taking the test, which to some extent was probably due to the good relationship between the teachers and the students that had developed during the course of the term. On the other hand, it was obvious that attempts to administer additional parts of the intelligence test would have been going too far.

In the present section we have dealt mainly with the general layout of the experiment without, however, penetrating into the details of the experimental procedures. The experimental lessons and the evaluation instruments will be described in detail in special sections. The schedule of class meetings for each of the six classes involved in the experiment will be given in section 3.3.3.

3.3 The Population

Our first task in this section will be to give a thorough description of our sample, which in spite of its small size shows considerable diversity in many respects. Secondly, we shall attempt to illustrate to what extent our sample may be considered representative of the population involved in municipal adult education on the one hand, and of the whole population eligible for such studies on the other. Finally, we shall describe on what grounds our sample was divided and assigned to two treatments, and in doing so we shall compare the six classes as well as the two treatment groups between themselves.

3.3.1 The Experimental Population Described

The experimental population consisted of six classes each between 14 and 30 adult learners, all of them registered with the School for Adults for the same type of elementary course of English. The final sample was 125.

Common Characteristics

Formal requirements. Various studies describing the characteristics of adult learners reveal great diversity of the population with respect to age, educational and social background, and other variables (cf. Johansson and Molander, 1970, p.68). Our sample is no exception. In fact, the subjects of our experimental population have but few characteristics in common. Among these can be mentioned that having registered with a municipal school for adults they must have fulfilled certain requirements. Any student admitted to municipal adult education can, therefore, be characterized as one who has either no formal education beyond compulsory school or has interrupted or finished secondary school. There is also a minimum-age requirement which is 18 for the gymnasial school level and 16 for the comprehensive school level.

Apart from fulfilling these requirements, which does not necessarily make for a very homogeneous group, our subjects were fairly comparable in terms of previous training of English. Having enrolled in the same type of course they could be characterized as people having a basic knowledge of English. This, however, allows considerable variety in initial proficiency in English, as will be seen below.

The Level of the Regular Course. A few words about the level of the course our subjects attended may be in order especially with regard to the reader not familiar with Swedish conditions. English as an obligatory subject is, at present, introduced in grade 4 of the 9-year comprehensive school (cf. Appendix 4). Municipal schools for adults offer one-term courses of English corresponding to grades

7, 8, and 9. These courses are called English 1, 2, and 3 respectively. The subjects of this study attended English 1 courses, which means that they had the possibility of acquiring comprehensive school competence in three terms. After the completion of the third term such students are entitled to study English at the gymnasium level. Since the English 1 course corresponds to grade 7, it presupposes a knowledge of English roughly comparable to that which is acquired by ordinary pupils in grades 4 to 6. However, there is great flexibility when admitting students to these courses, the only restriction being that students with absolutely no prior training in English should first attend a one-term beginners´ course, offered by the same school.

Educational Background. The fact that the subjects registered for the English 1 course determines to some extent their educational background. As is shown in Table 3.11, 73 % of the experimental population had compulsory education only. This means that the sample is less heterogeneous than most other groups of adult learners, particularly if we compare it with those at the gymnasium level where previous formal education usually covers a wider range.

Social Background. Since the students of the School for Adults are not requested to supply information concerning profession and income, and the investigators did not consider these data worth the unfavorable effect that questions of such personal character might have had on the subjects, there are no data available for a reliable distribution according to social background. Some clues as to what social class is represented by the majority of our subjects may be found in data on their educational background (Table 3.11) and main occupation (Table 3.4), but since such speculations cannot be very reliable, we do not venture any guesswork on this matter.

Motivation. A characteristic that the majority of the subjects may have had in common is the level of motivation. Since they study on a voluntary basis and have reached mature age, adult learners--in our special sense of the term--are usually highly motivated. However, competence in English at the comprehensive school level is also a formal requirement for studies at a higher level, and therefore a number of students may have taken up English only because they had to. Studying a subject for such a reason does not necessarily guarantee a high level of motivation. In the attitude test we included two questions which, we hoped, would reveal the motives of the students for studying English and their attitude to the subject in general. Question 18 of the Attitude Test with a set of alternative answers reads: I am studying English ( ) only for pleasure, ( ) both because I enjoy it and because it is useful, ( ) only because I have to for the following reason/s: ....

Answers were converted to a falling 3-point scale--the first alternative corresponding to 3--and data processed. Results are given in Table 3.1.

Table 3.1 Motivation According to Item 18 of the Attitude Test

	Code value				
	1	2	3	No data	$\bar{x}$
Frequency	21	87	2	15	1.83
%	16.8	69.6	1.6	12.0	

The small number of subjects who study English only for pleasure can be explained by the competence-giving character of the school. Those adults who wish to take up a foreign language--or any other subject for that matter--as a pastime, usually join study circles run by various study associations where they may study on a less formal basis without having to achieve certain requirements. Although the majority find English both enjoyable and useful, there is a non-negligible group admitting that they study English only because they have to. Therefore it is interesting to look at the answers to item 19 of the Attitude Test which reads: My attitude toward languages (especially toward English) is as follows: ( ) I very much enjoy studying languages, ( ) I quite like studying languages, ( ) I do not enjoy studying languages very much, ( ) I do not like studying languages at all.

Again, the answers were codified according to a falling scale--the most favorable answer corresponding to 4 points--and data processed. Results are presented in Table 3.2.

Table 3.2 Attitude Toward English According to Item 19 of the Attitude Test

	Code value					
	1	2	3	4	No data	$\bar{x}$
Frequency	-	8	51	63	3	3.45
%	-	6.4	40.8	50.5	2.3	

As can be seen, no subjects state that they dislike studying English, and it is also apparent that the majority even of those who admit that they learn English only because they have to--21 according to the previous table--have a favorable attitude toward the subject. On the basis of these two items of the questionnaire it can be stated that the sample constitutes a highly motivated group.

Since the questionnaire containing the above two items was administered after the experimental lessons, it may be argued that the students' responses had been influenced by the experiment. As will be shown in Chapter 4, there is no reason to suspect that the motivation of the subjects or their attitude toward English was affected by experimental activities, in either positive or negative direction.

Diversity

In the rest of this section the experimental population will be described with respect to variables in which it is heterogeneous rather than homogeneous.

Age. Age distribution for males, females, and the entire experimental population, is shown in Figures 3.2, 3.3, and 3.4.

$N = 125 \quad \bar{x} = 32.98 \quad s = 9.11$

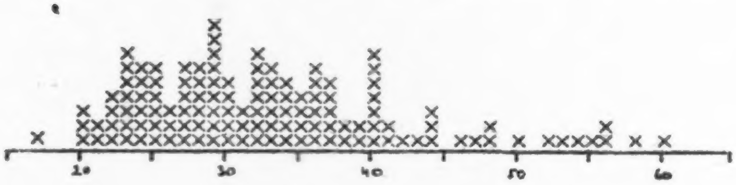

Figure 3.2 Age distribution of the entire experimental population

$N = 42 \quad \bar{x} = 28.7$

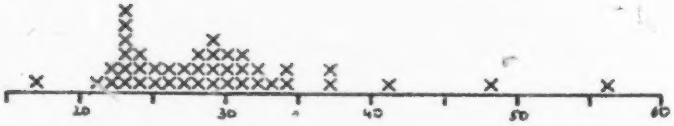

Figure 3.3 Age distribution of males

$N = 83 \quad \bar{x} = 35.0$

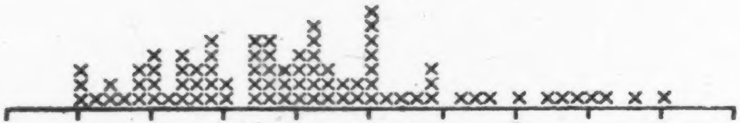

Figure 3.4 Age distribution of females

Table 3.3 Age Distribution of Subjects

	N	%	$\bar{x}$	Percentage of subjects aged <25	26-35	>36
Males	42	33.6	28.7	35.7	52.4	11.9
Females	83	66.4	35.0	16.9	38.6	44.6
Total	125	100.0	33.0	23.2	43.2	33.6

What is most striking in these data is the large percentage and higher age of the female participants. However, as will be shown in the next section, this is not unusual with groups of adult learners.

Main Occupation. As was mentioned above, there are no exact data that could illustrate the probably very wide range in profession, social and economic background, and previous vocational training of our experimental population. However, in order to get an idea of the work-load of our subjects, we did ask them to supply information as to their occupation and number of subjects they studied, including English. On the basis of the information given by the subjects we can divide them into the following groups: (1) those who had full-time jobs, (2) housewives, (3) those who had part-time jobs, and (4) full-time students (Table 3.4).

Table 3.4 Main Occupation of Subjects

	Working full-time	House-wives	Working part-time	Full-time students	No data	Total
Males	35	-	1	4	2	42
Females	22	37	15	4	5	83
Entire sample	57	37	16	8	7	125

The table reveals that only 6 % of the experimental population were in the position of devoting themselves entirely to studies. The bulk of the group had taken up English and in many cases another subject in addition to having jobs or working in their homes.

Number of Subjects Studied. The experimental population was fairly heterogeneous with respect to involvement in study. The students were asked to supply data on the number of subjects they studied at that time (see Table 3.5).

Table 3.5 Number of Subjects Studied per Student

	Number of subjects					
	1	2	3	4	No data	$\bar{x}$
Frequency	63	20	32	7	3	1.86
%	50.4	16.0	25.6	5.6	2.4	

The majority of those who studied one subject only, i.e. English, were those who had full-time jobs, and had, consequently, difficulty in coping with more than one subject. The small group studying as many as four subjects, on the other hand, practically coincided with those we called full-time students.

Work-Load. The two kinds of information dealt with above were combined and codified according to certain principles and used for distributing the subjects into two groups: one with normal work-load and one with heavy work-load. The following categories were considered to have a normal work-load:

- Male student with full-time job, studying one subject
- Female student with full-time job but no children to take care of, studying one subject
- Part-time worker studying one subject
- Full-time student

The following categories were considered to have a heavy work-load:

- Male student with full-time job studying two or more subjects
- Female student with full-time job but no children to take care of, studying two or more subjects
- Female student with full-time job having children, studying any number of subjects
- Part-time worker studying two or more subjects

The wide range of the above combinations was codified 1 for normal work-load and 2 for heavy work-load. Results are given in Table 3.6.

Table 3.6 Distribution According to Work-Load

	Normal work-load (1)	Heavy work-load (2)	No data	$\bar{x}$
N	44	78	3	1.64
%	35.2	62.4	2.4	

We are well aware that this distribution according to work-load give but a very rough idea of the real situation. By dogmatically codifying subjects according to the above principles we have undoubtedly put subjects in the same category even though many of them may have experienced their work-load differently themselves. In distributing the subjects to one category or another we did not, and could not possibly, take into consideration their physical and intellectual capacity, the varying degree of strain caused by their jobs, and many other circumstances that are not revealed by the concise information supplied by the subjects. Establishing the work-load variable is defensible only because of the value of any data that can contribute to a more complete picture of so heterogeneous a sample as the present one and because of the value it represents in comparing the two treatment groups (cf 3.3.3).

Proficiency in English. Another variable on which our sample exhibits great diversity, and which with regard to the nature of our investigation is of particular interest, is their initial proficiency in English. It is true that having qualified for the same course of English, our subjects belonged to the same category of learners of English, which could be described as a group of people with some previous training in the subject. However, there is no doubt about the large diversity that existed within these limits. Even though a large percentage of the subjects may have had the same educational background, e.g. 7-year elementary school with two years of English, their initial proficiency in the language at the beginning of the course could vary considerably depending on the length of time that had elapsed since leaving school, the amount of English they had been exposed to during the period between schools, and many other factors. Besides, even the rather incomplete information given by the subjects on their previous training in English shows an extremely wide range of different courses attended, such as radio courses, correspondence courses, study circles, courses at Folk High Schools, etc. It should also be mentioned that although we did recommend beginners to transfer to adequate courses, some of the students with no, or practically no, knowledge of English preferred for some reason or another to stay with the English 1 course.

The great divergency in the proficiency in English of the subjects as measured by the Proficiency Test, FACT, and the Pre-test, is well reflected in the scores of these tests. The dispersion in these test scores is illustrated in Figures 3.5 - 3.11.

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Test Scores

N = 125 $\bar{x}$ = 15.37 s = 6.18

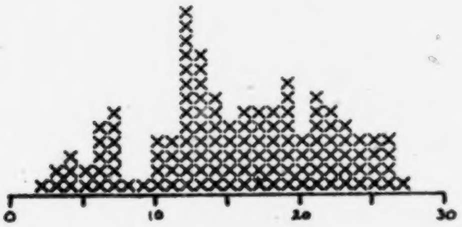

Figure 3.5 Proficiency Test, Part 1 (Vocabulary)

N = 125 $\bar{x}$ = 15.38 s = 4.29

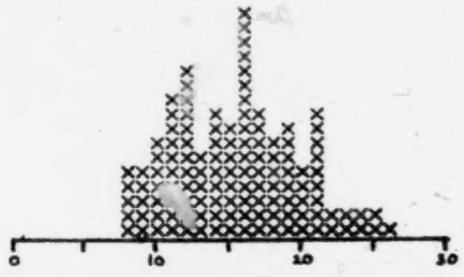

Figure 3.6 Proficiency Test, Part 2 (Grammar)

N = 125 $\bar{x}$ = 30.75 s = 9.46

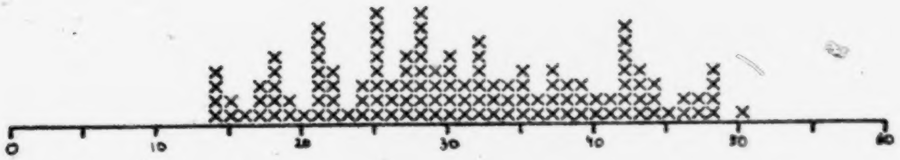

Figure 3.7 Proficiency Test (Entire)

N = 124 $\bar{x}$ = 31.06 s = 10.85

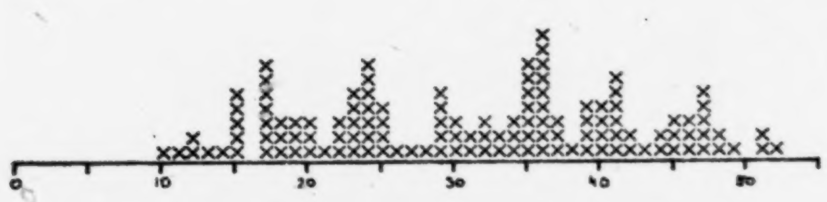

Figure 3.8 PACT (Pictorial Auditory Comprehension Test)

Test Scores (cont.)

N = 125 x̄ = 26.27 s = 7.58

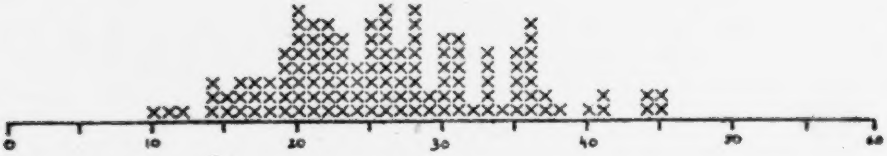

Figure 3.9 Pre-test, Part A

N = 125 x̄ = 22.70 s = 6.47

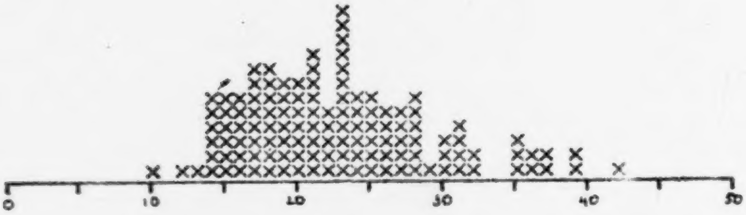

Figure 3.10 Pre-test, Part B

N = 125 x̄ = 5.74 s = 3.33

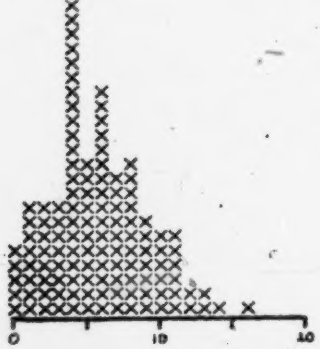

Figure 3.11 Pre-test, Part C

Verbal Aptitude. The scores on the Verbal Aptitude Test suggest that the group was rather heterogeneous with respect to verbal aptitude as well (Figure 3.12).

$N = 111 \quad \bar{x} = 51.40 \quad s = 9.22$

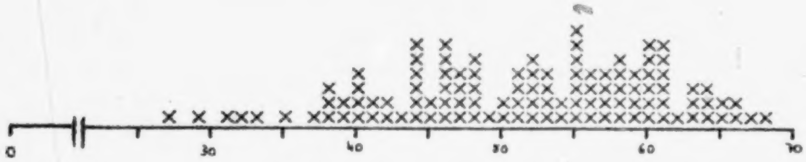

Figure 3.12 Verbal Aptitude Test

Summary

In summing up it can be said that although the experimental population constitutes a rather heterogeneous group, the majority of the subjects have at least some features in common. They are adults who have returned to school in order to improve their basic education or to complete previously interrupted formal education. Most of them are hard-working people studying in addition to their main occupation, i.e. full-time work or household and family duties. Their previous education is non-academic, and consequently, they have little linguistic training. They have some prior training in English but are not far beyond the beginners´ level. It seems safe to say that most of the students are highly motivated.

Within these limits, however, the group is rather heterogeneous in that it covers a wide range with regard to age, main occupation, social status, work-load, educational background, and even proficiency in English.

3.3.2 Representativeness

The Sample

In selecting our experimental population our possibilities were extremely limited. In fact, having been confined to a certain geographical area and to a course of English at a particular level, any of the commonly accepted sampling procedures for selecting a representative experimental population was out of the question: our sampling unit was the class. The sample of this study, therefore, is the result of resources rather than of selection: we had to accept what was available. The final sample of 125 subjects is a very small percentage not only of the whole population of adult learners, but also of those who study English at the comprehensive school level. Extending the experiment beyond its final dimensions in order to get a larger sample would have met with a number of practical, administrative, and economic difficulties.

The question arises, then, as to what degree our comparatively small sample can be considered representative of the entire population of adult learners at the municipal schools on the one hand, and of the total population of adults who are eligible for municipal adult education and may be looked upon as prospective students on the other.

The vast majority of the entire Swedish population between 15 and 65 has only six- or seven-year elementary education (De gymnasiala ... , p. 55). It is very likely that this adult population shows a similar structure to our sample not only with regard to age and educational background, but also in social background and distribution by the sexes. The large percentage of females in our sample is no coincidence. Since females have a relatively lower standard of education than males, the population referred to above certainly comprises a larger proportion of females.

Adult Learners and Non-Learners

In certain respects the population already involved in studies differs from those who have not yet been recruited to adult education. Some of these differences have been revealed in a descriptive study comparing adult learners with a control group of non-learners on intelligence and personality variables (Johansson and Molander, 1970). One of the findings of this study is particularly interesting and relevant to our own study, since the majority of our subjects have only six- or seven-year elementary education. According to the study in question, adult learners did better on intelligence tests than the control group. The category that had only six- or seven-year elementary school was found especially superior to the corresponding control group. On personality variables, however, the differences were insignificant for the same groups (p.67).

Two interpretations are offered. Adult learners of this particular educational background who, for various reasons, did not have the opportunity for further studies, form a "well-balanced" group of good intellectual capacity. Or, it can be concluded that adult education attracts only those people with a low standard of education who feel confident that they can complete their studies and have the motivation and character to cope with the extra burden of studies. To this conclusion it may be added that the adult learners at the comprehensive school level seem, at present, to constitute something of a select group in spite of their inadequate formal education. If the authorities and the schools for adults are successful in recruiting the non-learners in coming years, a decreasing average intellectual level of the prospective comprehensive school clientele is to be expected.

Comparison of the Sample with the Population of Adult Learners

In the rest of this section an attempt will be made to compare our sample with the population involved in municipal adult education. As was mentioned in Chapter 1, in addition to municipal adult education there exist a number of other types of schools, associations, and organizations providing for the teaching and training of vast groups of adults (see also Appendix 4). It is apparent that students of the municipal schools for adults represent a minority of adult learners, whose total number is well over a million according to all estimates. In this study we are dealing with this minority group only.

In Table 3.7 we present some data provided by the National Central Bureau of Statistics which are illustrative of the dimensions of municipal adult education.[1] All data pertain to the status of fall 1970, i.e. the same time as our experiment was carried out.

Table 3.7 Municipal Adult Education in Sweden, Fall 1970

Type or level of school	Net (actual) number of students	%	%	Percentage of females
Gymnasium	44 523	51	27	58.5
Continuation school	5 004	6	3	40.7
Comprehensive school	37 438	43	23	61.6
Non-vocational school, total	86 965	100	53	59.0
Vocational school	79 032		47	66.2
Total	165 997		100	62

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[1] The data presented in Tables 3.7 - 3.10 are based on issue U 1971:8 of Statistical Reports published by the National Central Bureau of Statistics.

As can be seen, with the exception of the continuation school, females are in majority in all types of schools. The dominance of female students is well reflected in our experimental population whose rate of female participants is 66.4 % (see Table 3.3). The probable reason for this over-representation of female students as compared with the entire comprehensive school population (61.6 %) is that the dominance of female students is usually larger in arts than in the sciences.

In the following tables data for the vocational school will not be incorporated, since our experimental sample mainly represents students who intend to improve their basic education rather than train for specialized fields. In order to avoid too many details, data will be given for the entire non-vocational section of municipal adult education, comprising gymnasium, continuation school, and comprehensive school, and for the comprehensive school separately (Table 3.8).

Table 3.8 Participation in Non-Vocational Municipal Adult Education

School	Net (actual) number of students	Gross number of students	Subjects per student	Number of participants in English courses	Number of participants in German and French courses
Non-vocational schools, total	86 965	169 459	1.95	40 837	17 217
Comprehensive school	37 438	79 136	2.11	23 268	7 841

The gross number of students, i.e. the number of participants in all courses offered by these schools is roughly twice as large as the actual number of students. In other words, the average number of subjects studied by each student is two. This roughly corresponds to the subjects-per-student rate of our sample (see Table 3.5).

The somewhat lower rate (1.86) in our sample is probably due to the larger percentage of females. That females study less subjects than males is confirmed by Lekberg (1971, p.75), though these data pertain to students at the gymnasium level. The table also shows the large participation in English courses. In fact, English is the largest subject on both the gymnasial and the comprehensive level. It is also obvious that courses in the three major modern languages attract a large percentage of the total student population. These figures suggest huge amounts of funds and time tied up in language studies at the adult level. Research contributing to a more effective use of the time devoted to language studies at this level must, therefore, be considered a good investment.

In Table 3.9 we shall investigate the representativeness of our sample with regard to age distribution.

Table 3.9 Age Distribution of Participants in Non-Vocational Adult Courses (Percentages)

Age	Entire non-vocational school			Comprehensive school			Experimental sample		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
-20	10	10	10	10	8	9	2	4	3
21-25	25	19	21	20	13	16	33	13	20
26-30	22	19	20	20	17	19	33	18	23
31-35	14	17	16	16	18	17	19	21	20
36-	27	36	33	34	44	40	12	45	34

Because of the small number of subjects in some cells the percentages in the three groups are not always in harmony with each other. However, the trend is very much the same: the rate of participants over 36 is higher for females than for males. This trend is probably due to the fact that it is around that age that women can get away from family and household duties and devote themselves to study.

It is worth mentioning that a comparison of the figures in the above table with corresponding figures from as late as 1968 shows an increase of the oldest age group. Here only the figures pertaining to the comprehensive school will be given (Table 3.10, based on Table 10.5.3 in Eliasson and Höglund, 1971).

Table 3.10 Age Distribution at the Comprehensive School (Percentages)

Age	1968	1970
-20	13	9
21-25	17	16
26-30	18	19
31-35	16	17
36-	36	40

These figures indicate that the schools have been successful in recruiting an increasing percentage of older people, which also means less qualified people. "The older the students the larger the number of those within the same age-group who have elementary education only" (Johansson and Molander, 1969, p.36).

Finally the sample and the entire comprehensive school population will be compared with respect to the educational background of the students (Table 3.11, based on Table 10.5.2 in Eliasson and Höglund, 1971).

Table 3.11 The Educational Background (Percentages)

Previous qualification	Entire comprehensive school population, Fall 1970	Experimental sample
Secondary school, upper level	4	1
Secondary school, lower level	16	8
Vocational school	10	6
Folk High School	4	6
Compulsory school	59	73
Other	7	6

Again, our sample seems to be representative of the adult population participating in courses at the comprehensive school level in that the majority has only compulsory education. The larger percentage of this group in our sample is partly due to the negative correlation between age and education according to the above quotation, and partly to the level of the English course the subjects attended: those who have studied at secondary level are not likely to be found in English 1 courses. They enroll directly in English 2 and 3 courses.

A comparison of our sample with the entire population as to intelligence or language aptitude is not possible, since, to our knowledge, there is no descriptive study of adult learners in which the same verbal aptitude test has been used as in our study. However, on the basis of what was said about the findings of Johansson and Molander (1969) before, it can be assumed that regarding intelligence our sample is superior to those adults who are eligible for, but not involved in, adult education at the corresponding level, but is fairly comparable to the actual adult comprehensive school population.

Summary

Summing up this section it can be stated that in most respects our experimental population carries the same characteristics as the population of the municipal schools for adults, especially that of the comprehensive school level. It can also be assumed that it is fairly representative of, although in some respects superior to, the vast group of Swedes who are eligible for studies at these schools.

3.3.3 Classes and Treatment Groups Compared

As was mentioned before, the administrators of the School for Adults were cooperative enough to appoint the investigators to teach the English 1 course in six classes during the fall term of 1970. As a result three classes with an expected minimum of 60 students could be assigned to each treatment.

The Six Experimental Classes

Since there were only six classes in all at the English 1 level in the Gothenburg area, it was not possible to pick six classes that seemed to be comparable in all respects. In fact, two of the classes were somewhat different from the rest. One class differed from all the others in that it was a day class. With the increasing number of full-time students and housewives involved in adult education, day classes are not unusual any longer at these schools even though the majority of students enroll in evening classes. Another class was different from the rest in that it belonged to the technical section of the school. This was the only class with an overwhelming majority of male students and it had the largest number of immigrants, too.

The class meetings were scheduled according to the time-table below. The identification numbers are those given to the classes after they had been assigned to different treatments. 01 was the "technical" class, 11 the day class.

Table 3.12 Schedule for Experimental Classes

Time	Monday	Tuesday	Wednesday	Thursday
12.25 a.m.	11		11	
6.05 p.m.		02 12	01	03 13
7.50 p.m.	01	03 13		02 12

As determined by the time-table, each of the investigators had to teach two classes scheduled on Tuesdays and Thursdays. Consequently the technical class and the day-class had to be taught by different teachers.

Distribution Over Treatments

A distribution of the classes to treatments was not possible until they had been compared on some background variables. A comparison was done on the basis of the Proficiency Test and PACT scores presented in Table 3.13 for each class separately.

Table 3.13 A Comparison of the Experimental Classes on the Proficiency Test and PACT

Class	N	Proficiency Test		PACT		Prof. T. + PACT	
		$\bar{x}$	s	x	s	x	s
01	20	31.50	8.65	37.25	8.20	68.75	15.80
02	30	31.57	9.24	30.87	10.60	62.43	18.02
03	24	30.83	11.67	32.79	12.95	63.63	12.46
11	32	31.66	9.69	28.06	9.58	59.72	17.84
12	29	29.14	9.35	33.41	11.02	62.55	18.10
13	19	30.00	7.72	29.89	9.81	59.10	15.53
Total	154	30.81	9.59	31.77	10.89	62.46	18.62

Analyses of variance in Tables 3.14 - 3 .16 show that the differences between the classes with respect to initial proficiency in English as measured by the two tests were statistically non-significant, although the F ratio on PACT was near the critical value (2.27) due to the large difference between the highest and lowest scores yielded by the technical class and the day class respectively.

Table 3.14 Analysis of Variance (Proficiency Test)

Source of variation	Sum of sqs	df	Variance estimate
Between	143.18	5	28.64
Within	13.996.36	148	94.57
Total	14.139.54	153	F = 0.30

Table 3.15 Analysis of Variance (PACT)

Source of variation	Sum of sqs	df	Variance estimate
Between	1.235.18	5	247.04
Within	17.039.87	148	115.13
Total	18.275.05	153	F = 2.15

Table 3.16 Analysis of Variance (Proficiency Test + PACT)

Source of variation	Sum of sqs	df	Variance estimate
Between	1.290.48	5	258.10
Within	52.442.08	149	351.96
Total	53.732.56	154	F = 0.73

For several reasons it was desirable that classes having the same teacher be assigned to the same treatment. In this way each investigator had to carry and administer one program only. The most important reason, however, was that such a distribution of experimental classes made it possible for the investigators to run each other's lesson series. Since the investigators were mainly responsible for devising one experimental lesson-series each, it was desirable to neutralize possible bias toward their own lesson materials. Therefore it was decided that classes taught by Oskarsson were to be given the implicit lesson series devised by von Elek, and vice versa (see also 3.4.3). The implicit classes were then codified 01, 02, and 03, and the explicit classes 11, 12, and 13.

Drop-Outs. As the Proficiency Test and PACT were given at an early stage of the term, the number of students participating in these tests, N = 154, was higher than the final sample, N = 125. A few words about the drop-out rate are, therefore, in order.

As participation in adult education is on a voluntary basis, the drop-out rate is in general rather high. Experience shows that the largest percentage of drop-outs, at least in English classes, discontinue their participation at an early stage. It is not uncommon that people register for a course but do not even attend the first meeting; others stop attending after a few lessons. As a rule, the number of participants becomes more and more constant, and after the middle of the term drop-outs become rare. Investigating the reasons why people discontinue their studies, and taking measures to decrease the drop-out rate are certainly urgent tasks in adult education. However, they are outside the scope of this study, and since the rate of drop-outs was not larger in our classes than is normal, there is no reason for going deeply into the matter. In our study we have to do with two kinds of drop-outs. Firstly, those who actually dropped out at some phase of the course and consequently did not participate in all experimental activities. Secondly, those who participated both in the course and in the experiment, but were absent from more than two experimental lessons. Thus, they were drop-outs only from the point of view of the experiment.

As can be seen in Table 3.13 the number of students participating in both the Proficiency Test and PACT, i.e. those who attended the course at a fairly early stage, was 154. The number of students who completed the course was 138. The 16 actual drop-outs correspond to about 10 %, which can be considered a normal, or even low rate.[1] We could see no reason for keeping a record of those who dropped out before PACT was administered or those who never started the course in spite of having registered for it.

13 students, i.e. another 10 percent of the experimental population, were not included in the final sample because they had missed more than two experimental lessons.

Classes Compared. The six experimental classes--according to the final status--are compared on a number of variables in Table 3.17.

In order to make an overall view of the table easier, N is not given for each variable, although there have been some divergencies in a few variables. Means are given with one decimal only, and standard deviations are not listed at all. When comparing the two treatment groups (Table 3.18) we shall give more exact data.

A brief interpretation of Table 3.17 amounts to the following: the English test-scores show small differences between classes. The technical class (01) has the highest overall scores on these tests. There are no large differences in aptitude either.

With respect to age, however, the technical class (01) and the day class (11), constituting the youngest and the oldest classes respectively, differ from the rest. The percentage

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[1] A drop-out rate of 22 % (varying from 16 % to 27 % in different schools) in the Stockholm area during the fall term 1969 has been reported in De gymnasiala ... (1970, p.82).

Table 3.17 A Comparison of the Experimental Classes on Various Background Variables

Variable	Max		Classes					
			01	02	03	11	12	13
			(N=14)	(N=24)	(N=19)	(N=30)	(N=22)	(N=16)
Proficiency Test	60	$\bar{x}$	32.4	31.6	29.1	32.4	28.9	29.3
PACT	55	$\bar{x}$	38.5	30.9	31.1	28.1	32.1	28.5
Pre-test: A	60	$\bar{x}$	29.4	26.1	26.2	25.4	26.3	25.4
Pre-test: B	50	$\bar{x}$	25.6	22.5	24.0	22.9	20.3	21.9
Pre-test: C	20	$\bar{x}$	7.2	5.5	5.4	6.1	5.0	5.8
Verbal Aptitude Test	70	$\bar{x}$	50.5	53.9	49.1	51.0	49.1	55.3
Age	-	$\bar{x}$	26.6	32.7	31.1	36.7	32.6	34.6
Percentage of females		%	14	67	53	83	86	69
Absent > 2 times		N	4	3	4	-	1	1
Absence	2	$\bar{x}$	0.9	1.0	0.7	0.5	0.4	0.6
Subjects per student	4	$\bar{x}$	2.9	1.8	1.7	2.0	1.7	1.3
Work-load	2	$\bar{x}$	1.9	1.7	1.5	1.6	1.7	1.4
Motivation (Item 18 of Att. Test)	3	$\bar{x}$	1.8	1.9	1.8	1.8	1.9	1.7
Attitude (Item 19 of Att. Test)	4	$\bar{x}$	3.7	3.4	3.4	3.5	3.6	3.1

of females is understandably low in the technical class and high in the day class. The fact that female participation was lower in 02 and 03 than in 12 and 13 must be ascribed to coincidence.

Certain differences between individual classes could hardly have been avoided even if there had been a greater choice of classes eligible for our experiment.

Table 3.18 A Comparison of the Two Treatment Groups on Various Background Variables

		Treatment								
		IM			EX			Total		
Variable	Max	N	$\bar{x}$	s	N	$\bar{x}$	s	N	$\bar{x}$	s
Proficiency Test	60	57	31.00	10.13	68	30.54	8.94	125	30.75	9.46
PACT	55	57	32.84	11.35	67	29.54	10.24	124	31.06	10.85
Pre-test	130	57	56.56	18.32	68	53.18	13.57	125	54.72	15.94
Verbal Aptitude Test	70	48	51.27	10.19	63	51.49	8.49	111	51.40	9.22
Age	-	57	30.68	8.08	68	34.90	9.53	125	32.98	9.11
Percentage of females	-		49			81			66	
Absent$>$ 2 (N)	-	11			2			13		
Absence	2	57	0.84	0.84	68	0.49	0.72	125	0.65	0.80
Subjects per student	4	55	2.04	1.00	67	1.72	0.98	122	1.86	1.00
Work-load	2	55	1.69	0.47	67	1.60	0.49	122	1.64	0.48
Motivation (Item 18 in Att. Test)	3	50	1.84	0.42	60	1.82	0.43	110	1.83	0.43
Attitude (Item 19 in Att. Test)	4	56	3.48	0.57	66	3.42	0.66	122	3.45	0.62

Treatment Groups Compared. In the rest of this section we shall investigate the differences between the final treatment groups, IM and EX, on variables used for comparing the classes (Table 3.18).

The superiority of the IM group in proficiency in English is small but consistent in all language tests. The difference in aptitude is negligible. Age difference, caused mainly by the youngest class and the oldest class ending up in different treatment groups, is statistically significant (p.$<$.01). The same two classes are to some extent also responsible for the difference in the percentage of females as 01 consisted mainly of males and 11 mainly of females. Whether or not there is any connection between the rate of absentees and treatment is difficult to tell. The large differences in the number of absences on the one hand and in the absence-rate within the 2-lesson limit on the other suggest that there should be some other explanation than mere coincidence (See Chapter 5).

Whereas the subjects per student rate and work-load variables seem to be objective measures, it may be argued that attitude, as measured by items 18 and 19 of the Attitude Test, may have been influenced to some degree by the experimental lesson series, since the test was given immediately after the last experimental lesson and contained questions connected with the "Special Course" (i.e. the Experiment). Anyhow, the differences on these variables are rather small.

Summary. A thorough comparison of the six classes at our disposal for experimental purposes showed that they were fairly comparable in most respects. The largest differences were in terms of age, ratio of females to males, as well as in absence. The possible effect of these differences on results will be investigated later in this study.

3.4 The Experimental Lesson Series

3.4.1 Grammatical Structures Taught

As was indicated before, the experimental lesson series consisted of ten prerecorded 40-minute lessons per method. The aim was to teach five grammatical structures of English, selected according to the following principles: (1) they should be of the type of structure that cause difficulties to Swedish learners because of syntactic differences between the two languages; (2) they should not occur or be dealt with in the regular course; (3) they should be unknown to the students; and (4) they should be easy enough for students at this level to learn.

The rather long preliminary list of grammatical structures that met the first requirement shrank considerably upon the examination of the course to be used at the English 1 level. Several grammatical structures, e.g. the do-construction and the progressive, that otherwise would have made good experimental material, had to be crossed out simply because they were incorporated in the regular course.

The grammatical structures that were found to meet the above requirements and that were eventually selected for experimental purposes were (1) the use of some and any and their compounds, (2) adjectives and adverbs, (3) preposition + the gerund, (4) possessive pronouns, and (5) the passive voice. None of these were dealt with in the regular course even though some, any, and a number of adjectives and adverbs occurred in the textbook as lexical items without, however, any systematic attempt at illuminating the difference between their syntactic features. The low scores of the pre-test show that the structures were largely unknown to the subjects, which implies that the choice was successful. The total number of items of the achievement test (130) was equally divided between the five structures, which makes 26 items in each group. As can be seen in Table 3.19, only for one of the five structures did the percentage of correct answers slightly exceed 50 %, in spite of the fact that 110 items were multiple choice items and therefore a certain percentage of the correct answers should be ascribed to chance.

Table 3.19 Pre-Test Scores per Structures

	Structure	$\bar{x}$	s
1.	Some/any	12.66	4.27
2.	Adjective/adverb	8.30	2.81
3.	Preposition + the gerund	9.31	4.79
4.	Possessive pronouns	13.20	4.12
5.	The passive voice	11.25	4.18

Naturally, only those aspects of the grammatical structures were taught in the experimental lessons that were considered to suit the level of the course and the proficiency of the majority of the students. Thus teaching the passive voice was limited to its use in the present and--with few exceptions--to weak verbs.

3.4.2 Time Distribution

Since the grammatical structures were not equally complex, the ten lessons at our disposal were not divided equally between them. The proportion of time devoted to each structure is illustrated in Figure 3.12. As can be seen, there were considerable differences. Structure 1 was covered in three lessons, while structure 3 and 4 were given half of that time each. As a rule, a short revision of the previous lesson was made at the beginning of each lesson, but once a new structure had been introduced, previous structures were not dealt with any more.

The distribution of time to the various structures with regard to the varying complexity of the structures was followed in both lesson series. As a matter of fact, a great effort was made to keep the time factor constant in the two approaches. Thus the time allotted to each structure, to revision and new material, and to the entire series was much the same (See Appendix 2). A complete equalization of the lesson time seemed to be extremely difficult to achieve in spite of the fact that minor adjustments in time were made even after the recording of the lessons.

	Experimental lessons									
Min.	1	2	3	4	5	6	7	8	9	10
10	Intr.	1a	1b	1c	2a	2b	3	4a	4b	5
20										
30	1a	1b	1c	2a	2b	3		4b	5	5
40							4a			

Figure 3.12 Distribution of Experimental Lessons to Structures Taught

1 = some/any
2 = adjective/adverb
3 = preposition + the gerund
4 = possessive pronouns
5 = the passive voice

The symbols a, b, and c stand for units into which the teaching of a structure had been broken down.

3.4.3 Devising the Lessons

The procedure of devising the experimental lessons can be described briefly as follows:

After having decided how the time should be distributed to structures, and what aspects of these structures should be covered in each lesson, the investigators began devising two parallel lessons with writing the basic dialog. Their intention was to include several examples of the structures to be taught during the particular lesson without making the dialog too artificial. Another requirement was to use as few new and difficult words as possible, since the goal was to teach grammar, not vocabulary. It became a practice to devise the IM lesson first. Centered around the structure introduced in the dialog, several sets of oral and written pattern drills were elaborated. After completing the IM lesson the corresponding EX version was devised according to the principle that, whenever possible, only those words and sentences should be used in the exercises and explanations that occurred in the IM lesson.

As was mentioned before, the investigators were mainly responsible for one method each. The reason why the investigators decided to devise one experimental lesson series each was not so much to attempt to divide the burden equally, but rather to assign the production of each lesson series to the person best fitted for the task, thus ensuring as good lessons as possible in each treatment. With regard to von Elek´s background and teaching experience he was considered the more competent of the two to devise the IM program, since he had taught several languages according to the audio-lingual method in the USA and according to the intentions of the Official Curriculum in Swedish comprehensive schools. Oskarsson, on the other hand, was judged to be the right person for devising the EX program, as he was more used to teaching grammar analytically owing to his experience as a teacher of grammar courses at the university. It ought to be mentioned that, without being prejudiced against, or biased toward, any particular teaching method, each investigator had a favorable attitude toward the type of method the lesson series assigned to him was to represent, and made a great effort to produce the best possible lessons within the limits determined by experimental procedures.[1]

This does not mean, however, that the investigators did not have to cooperate closely; in fact, once two parallel lessons had been finished, a thorough comparison was made between the contents of the lessons both with respect to quantity and quality. These checks usually resulted in adjustments of certain details. When the two lesson series had been completed in manuscript, workbooks containing the dialogs and written exercises were printed, transparencies accompanying the lessons were made, and the lessons were recorded. It was hoped that by these arrangements the teacher variable could be neutralized and the quality of experimental lessons kept equal.

3.4.4 Administering the Lessons

An experimental lesson was administered in the following way. The experimenter, who in our case was identical with the investigator and the regular teacher, started the prerecorded tape, which for a minute or so played music. This allowed students to get ready for the lesson and the experimenter to hand out the workbooks. By the time the lesson proper started, the experimenter had taken his seat by the overhead projector and started operating it according to instructions from the tape or the teacher's manual. The timing of pauses in structure drills as well as for written exercises was taken care of by the tape. Each lesson ended with some music during which the teacher collected the workbooks and the students could relax for a while before it was time to proceed to regular course activities. As a result of using "prefabricated" lessons, the role of the teacher was reduced to purely mechanical activity such as handing out and collecting workbooks and operating technical aids. He never even tried to interfere with the teaching by adding extra explanations or offering guidance. All instructions were on the tape. It is believed, therefore, that the teacher factor was satisfactorily controlled during experimental lessons.

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[1] Some views reflecting such attitudes have been expressed in the following documents, published or written before the experiment: T. von Elek, "Prescription for the Völkerwandering Age", Odyssey 5 (1967), pp.7-9; M. Oskarsson, "Missriktat nit", Dagens Nyheter, January 17, 1969; reviews in Tidskrift för Svenska Folkhögskolan, No. 6 (1969), pp.317-318; No. 8 (1970), p.351; No. 1 (1971), p.47.

3.4.5 The Teacher´s Role

Since the investigators also served as the regular teachers of the classes outside the experimental sessions, it was important to neutralize the teacher´s role outside experimental activities as well. This was attempted by continuous and close cooperation between the investigators in order to be able to coordinate teaching both in respect of pace and manner. Besides following the same syllabus in all classes, the investigators met regularly every week to inform each other about the work done during the previous week and to plan the next few lessons in detail. It goes without saying that each teacher attempted to teach his own parallel classes in as like a manner as humanly possible. A neutral type of teaching method including balanced amounts of explanations and drills was agreed upon. The same course books, tapes, transparencies, and additional aids were used in all experimental classes. Naturally, a complete elimination of the teacher variable on these parts of the course was not possible since there were two persons involved. There is, however, good reason to believe that this factor did not affect results, as such an effect would have shown up in the outcome of the extra-experimental term test. This matter will be discussed in some detail in Chapter 4.

3.4.6 Other Variables

In addition to the problem of how to eliminate the teacher variable both within and outside experimental lessons, there was the question that the experimental material should be learnt exclusively through the lesson series. In order to prevent the students from following up the experimental lessons at home, the following measures were taken: (1) in the introductory lesson the students were instructed not to follow up what was covered in the Special Course, (2) the students were given ample homework connected with the regular course, to keep them busy and to keep their minds off the experimental lessons, and (3) the workbooks, which could have served as good aids for a revision of the lesson material, were collected after each experimental lesson. It can be mentioned here that this caused some dissatisfaction among the students, which is quite natural, as they were not familiar with the real objectives of the Special Course.

In order to check how effective these measures were, the following item with alternative answers was included in the Attitude Test (Item 17):

Although you were told at the beginning of the course not to follow up the lessons at home, you were probably curious and did some work on it. Please check your answer: ( ) Yes, I have done a lot of work, ( ) Yes, I have done some work fairly regularly, ( ) I have done some work a few times, ( ) I have hardly done any work, ( ) I have not done any work at all.

The answers were converted into a falling five-point scale, the first alternative corresponding to 5. The outcome is presented in Table 3.20. It shows that the majority of the students did not do any work at all. Only about 10 % checked the first two alternatives and the average is below 2, corresponding to "hardly any work done."

Table 3.20 Item 17 of the Attitude Test

Code value:	1	2	3	4	5	No data	$\bar{x}$
Frequency	69	19	22	11	1	3	1.82

Finally it ought to be mentioned that there is no reason whatsoever to suspect any experimental leakage between individuals and/or classes. Only two of the six classes had lessons at the same time in the same building, but since participants of different classes do not usually know each other, there is practically no communication between them.

3.4.7 Summary

In the present section an attempt has been made to acquaint the reader with the efforts made to devise and administer the experimental lessons in such a manner that no other variables than the methods themselves should account for differences in learning effect, if such differences were to be found at all. The lesson series were made as alike as possible in all respects except for methods employed: the grammatical content, basic dialog, vocabulary, a large number of practice-sentences, and also a number of written exercises were the same. The time devoted to the details and to the whole of the two lesson series, the quality and attractiveness of the lessons and accompanying aids of both approaches, and the way they were administered were essentially the same. Attempts were also made to keep the teacher variable constant both within and outside experimental activity, and measures were taken to prevent the students from following up experimental material outside school.

Nothing has been said, however, about the two approaches to teaching the same grammar according to two theories of language teaching. This will be done in the next section.

Further discussion of arguments as to the possible transfer effects of various experimental variables will be given in Chapter 5.

3.5 Experimental Methods

It has been stated before that the experimental lessons in the present study were not designed so as to reflect the principles and characteristic features of any particular methods. The intention was rather to elaborate two "pure" approaches to teaching grammar, in which elements of cognitive methods do not intermingle with those of habit-forming methods. Only in this way could we hope to achieve the main objective of the study, i.e. to find support for one of two theories, the audio-lingual habit theory and the cognitive code-learning theory.

3.5.1 Implicit

The Audio-Lingual Habit Theory

The audio-lingual habit theory is based, according to Carroll, on the following principal ideas: "(1) that since speech is primary and writing secondary, the habits to be learned must be learned first of all as auditory discrimination responses and speech responses; (2) that habits must be automatized as much as possible so that they can be called forth without conscious attention; (3) that the automatization of habits occurs chiefly by practice, that is, by repetition" (1965, p.278).

"According to the audio-lingual habit theory, information about the differences between the learner's native language and the target language . . . would confuse the student, who needs only to imitate the foreign language sounds and patterns until by practice he masters them" (Ibid.).

A foreign language teaching method reflecting the above ideas must, then, be characterized by the predominance of audio-lingual activity in the target language including large amounts of habit forming exercises, as well as by the absence of explicit explanations of foreign language phenomena.

Since the IM method was to represent the audio-lingual theory, the experimental lessons had to be devised with these main features in view. This does not mean, however, that the lessons had to correspond to a stereotype pattern determined by the underlying theory. In fact, it is quite possible to develop, within the limits of the same basic theory, several varieties of a method, depending on the specific objectives and the level of the course, and on the individual interpretation of the theory with regard to the amount, order, and forms of teaching techniques.

The aims of the present section are (1) to present the general principles guiding the preparation of the IM lesson series so that it should not only reflect the theory to be tested, but also correspond to a realistic and modern course using effective teaching techniques, (2) to supply information on the various parts of the lessons, their particular function, and their relationship both to theory and common language teaching practice, and (3) to give the reader a detailed picture of an average lesson as well as of the complete series. Throughout the section attempts will be made to compare the IM method to three major teaching methods related, in varying degree, to the audio-lingual habit theory, namely the direct method, the audiolingual method, and the modified direct method.

General Principles Guiding the Preparation of the IM Program

The use of the target language. It was one of our guiding principles to exclude the native language from the teaching of the grammatical structures by the IM method. This principle is well in harmony with Carroll´s above quoted audio-lingual habit theory in which there is an implicit statement of the desirability of avoiding the native language, and with foreign language teaching practices advocated particularly by the proponents of the direct method. The total exclusion of the mother tongue is, according to Grittner, one of the common characteristics of all those methods that can be lumped together under the designation "direct method". This approach is based upon the belief that second-language learning must take place in total isolation from the native language" (1969a, p.160).

The modified direct method as outlined in the Official Curriculum is also clearly in favor of the exclusive use of the target language. It contains totally monolingual sample lessons (Lgr 69, pp.16-29) and passages that leave hardly any doubt about the view of the authors on the use of the native language:

"Verbal explanations can (in this way) often be dispensed with" (p.4).

"Each grammatical rule must be formulated with English as its basis. This means that in the few cases where it is judged necessary to explain grammar in Swedish there should be no comparison between Swedish and English usage. English should be the only basis for the explanation" (p.14).

Of the three methods we are relating the IM method to, it is the audiolingual method that is the most generous with respect to the use of the native language. Because of common misconceptions about this method it seems to be important to emphasize with Grittner that the audiolingual method, which he calls the American Method, is often confused with the various direct methods (1969a, p.160), and that "Proponents of the American method believe that the mother tongue has a very definite place in second-language learning, and that, under proper conditions, the use of English can greatly speed up the learning process for the American high school student who is studying a foreign language" (Ibid., p.163). And further: "The advocates of the discriminate use of English base their thinking upon the belief that young adults in America cannot possibly escape the influence of English . . . The English habit is so strongly ingrained that no amount of direct-method drill can override its influence. . . . it is better to capitalize upon the student´s knowledge of English than to pretend that it is not there" (Ibid.). Then he lists the following uses of English as widely accepted by proponents of this method: to convey the meaning of dialogue material; to explain tests and drills; in cues for pattern drills; for cultural notes and grammatical summaries; and to dispel students´ doubts (Ibid., pp.163-166).

The Introduction to the teacher´s manual of one of the major American audiolingual courses supports Grittner´s information: "No student can leave his knowledge of English, with all that that knowledge implies, outside the door of the foreign language classroom and pretend that it does not exist for the relatively few hours he is there" (A-LM, 1963, p.2). Further it is stated that the method attempts to utilize effectively the knowledge that the student already possesses, by making intelligent use of the learner´s native language. In the course the native language is used to clarify lexical meaning, and to drill and explain grammar. It must not be overlooked, however, that in spite of the flexibility in the use of the mother tongue of some audiolingual courses "generalizations about grammar ought to be rigorously subordinated to habit formation." This habit formation is provided by "extensive experience with sentences and drills that exemplify grammatical points" which usually precede grammatical generalizations (Ibid.). Further, it is well known that a good many proponents of the audiolingual method are stricter in the use of the native language. Dealing with the audiolingual method Rivers states that "In some materials, mostly those devised for junior high schools, these generalizations are omitted because it is believed that the very design of the materials will lead to an inductive apprehension of structural relationship which will suffice for the student´s needs" (1968, p.43).

The exclusive use of the target language in the IM lessons, then, is not contrary to audio-lingual teaching principles. Meanwhile, it is well in line with the intentions of the proponents of the other two methods as well as with Carroll´s theory. The use of the native language, either for explanations or for generalizations, would have meant abandoning the major objective of the experiment, namely the assessment of the effectiveness of a purely implicit approach to teaching grammar.

Before leaving the discussion on the role of the native tongue, it ought to be mentioned that a few minor deviations from the principle of producing a monolingual lesson series were necessary.

Some of the lessons contained information and instructions on practical matters in Swedish. This information was the same in both lesson series and was necessary for the administration of the lessons.

The first IM lesson contained a good deal of Swedish instructions on how to perform the pattern drills. Since the success of habit-forming techniques is to a large degree dependent on the active participation of the students in such practice, we wanted to make sure that the subjects understood how to perform exercises incorporated in the lessons. "Misunderstood drill work leads to confusion, frustration, lack of classroom control, and loss of student respect for the teacher, the course, and the language itself. Thus, an extra minute or two spent on explaining the nature of the drill is generally time well spent" (Grittner,1969a, pp.214-215). In lesson two the instructions given by the native teachers were still translated into Swedish, but from lesson three onwards the lessons were entirely in the target language. Apart from the importance of giving the subjects thorough instructions on how to do pattern practice, the first two bilingual lessons were intended as a smooth introduction into a rather demanding course exposing the subjects to about 35 minutes of entire immersion in the target language on each occasion.

Another deviation from the principle of monolingualism was made in giving the Swedish equivalents of some words and expressions of the basic text in the margin. These words could have been taught by means of the target language according to the principles of direct association, but this was outside the aim of the lessons. In order to keep the task of grammar teaching and vocabulary teaching apart, our principle was to use, as far as possible, vocabulary familiar to the students, or to give the Swedish equivalents whenever there was a likelihood that a word or expression was unknown to some or several students. This is in agreement with general principles about conducting pattern practice: "Pattern practice does not involve the learning of new vocabulayy. In fact, any groping for words on the part of the student tends to destroy the effect of the drill" (Grittner,1969a, p.205), and further: ". . . genuine pattern drills must contain only vocabulary that is completely familiar to the student . . ." (Ibid., p.211). The Official Curriculum expresses the same opinion: "Unfamiliar structures are to be practised with familiar vocabulary" (Lgr 69, p.13).

Finally, the instructions to the written exercises, too, were given in Swedish. The reason for this was to make sure that the subjects understood what they were supposed to do, in case they had missed the instructions usually provided orally by the teacher's voice.

Audio-Lingual Activity. Another principle reflected in the IM method is the emphasis on audio-lingual elements. As will be seen in Section 3.5.3, the better part of each lesson is devoted to audio-lingual activity, such as listening to, and repeating of, texts, reading in chorus, and oral pattern practice. This, again, is in accordance with the basic theory and the three methods related to the IM method.

Since this principle is closely related to the idea of developing skills in the "natural order", it will be further dealt with in the next passage.

The "Natural Order" of Skills. The "natural order", i.e. presenting and practising language skills according to the sequence listening-speaking-reading-writing, was respected in the IM method whenever possible.

The three methods under discussion do not only stress the predominance of audio-lingual activity, but also emphasize that, since speech is primary and the written word secondary, priority should be given to audio-lingual skills, developed through listening and speaking. This principle is thought to be applied to an entire course rather than to a single lesson, and especially at the beginner´s level. Thus, audiolingual courses usually recommend a period of merely audio-lingual training, varying from a few weeks to an entire year, before the written word is introduced. Withholding the written word for shorter periods is thought to be particularly essential in the teaching of phonology, since the graphic symbols of a foreign language are very likely to contribute to the formation of bad pronunciation habits. However, the "natural order" is also recommended as a general principle in other fields of language teaching, e.g. in the teaching of grammar, especially when new subject matter is being introduced.

The following statement in the Official Curriculum can be interpreted as a recommendation of the "natural order": "well established oral skill should be the basis for reading and written exercises . . ." (Lgr 69, p.4).

According to a statement by Brooks, serving as the basic philosophy guiding the preparation of the Audio-Lingual Materials, "The visual-graphic phase is ancillary to language and important to it, but it can easily be foregone, as it is constantly in the daily life of everyone" (A-LM, 1961, p.3).

The "natural order" is also recommended in the Instructor´s Manual of another audiolingual course: "The method . . . assumes that language learning should properly begin with hearing and speaking and only afterwards proceed to reading and writing. The first two stages are of primary importance if the student is to acquire even a minimum of control of the spoken language. For this reason we strongly recommend that most material be first presented and practised with books closed" [emphasis supplied] (Dawson, 1964, p.2).

Inductive Approach. Teaching grammar by an inductive approach was a principle consistently followed in the IM method. This characteristic is also shared by the three methods we are dealing with in the present section.

The fact that the inductive teaching of grammar was advocated by the direct methodists is stated, among many others, by Harding, although he adds that this "may have been more a reaction against bad methods of teaching than a theory formulated for its own sake."

The Official Curriculum is also clearly in favor of an inductive approach, although it does not give any theoretical basis for its recommendation: "Comments, conclusions and rules come last. If the pupils themselves can be made to formulate a conclusion about what has occurred, linguistically, in the exercise, it is certain that they have achieved understanding through practice. It is this one should strive after. In certain cases, however, even a rule can reinforce what has been practised" (Lgr 69, pp.13-14).

A strong belief in the inductive approach to teaching grammar is also apparent from the teaching procedures of the audiolingual methods which offer grammatical generalizations after the practice period. This seems to be fairly typical of this method in spite of occasional statements such as the following one: "Sometimes, in order to avoid drilling in a vacuum, an explanation is given before the drills. This is done when it seems that the structural point will not be immediately clear or when the contrast between the two languages is so great or complex that the student should be made aware of the way Russian [i.e. the target language in this course] functions before he begins to do the drills" (A-LM, 1963, p.2).

It is apparent that giving rules or even explanations is not contradictory to the inductive approach as long as they are offered after the students have been given an opportunity of coming to conclusions on their own as a result of ample amounts of examples and/or practice.

In the IM method no rules, explanations, or generalizations were given. Whether or not students profited from an inductive approach was to be shown in the post-test scores. In view of the absence of grammatical generalizations and verbalized rules, our IM method is not in line with the majority of the audiolingual courses, although it is not contradictory to them either (cf. Rivers, 1968, p.43, passage quoted on page 3:34).

It must be noted that the subjects were never told explicitly what the drills were supposed to teach or practise, neither were they exhorted at the outset of practice to try to come to conclusions or enunciate rules. The logical consequence of making the students conscious of some hidden pattern or rule that they had to decipher during the exercise would have been to give them the rules or generalizations afterwards, especially for the sake of those who were unable to arrive at conclusions on their own. Then the IM lessons would have contained explicit explanations and would have disqualified both for the term implicit and for the purposes of the experiment. On the other hand it was our major concern that the students should fully understand both the manipulation involved in each pattern drill and the meanings of all sentences.

Parts of the Lessons

The Dialogue. Each grammatical structure or new aspect of it was introduced in a basic text, a dialogue, consisting of about 15 exchanges. The dialogue contained several examples of the structure to be taught during the lesson. Each dialogue was centered around a certain topic, e.g. At the Dinner Table, At the Theatre, Games, Buying a Car, etc. and involved a male and a female character talking informal English in basic vocabulary.

It was our intention to present and practise the new grammatical structures very much according to the recommendations of the Official Curriculum. Under the title "Grammar" the following recommendations are given:

"The learning of points of grammar is by means of systematic practice based on speech and text. Before the drill begins, the point to be practised should be exemplified in a natural context, which should preferably explain the meaning of the point" (Lgr 69, p.12).

"A further advantage is gained if the point occurs several times in the text under study. There should only be minor variations. In this way the chances of misunderstanding the structure are eliminated" (Ibid., pp.12-13).

"The drill can thus begin when the structure has been understood" (Ibid., p.13).

The dialogue corresponds to the above recommendations in that it presents the structure in a natural context and contains several examples of the structure without complicating it by unnecessary variations. Understanding of the structures by the students was to be achieved by presenting them in an easy and situational context, by giving the Swedish equivalents of some crucial words on the margin, and by repeated readings of the text. The dialogue was usually dealt with in the following way: (1) the students were requested to listen to the dialogue with books closed while the native teachers were reading it out to them, (2) during a second reading the students were allowed to follow the text in their workbooks, (3) underlined words and expressions, and the sentences in which they occurred were read out to the students with pauses for repetition in chorus, (4) the entire dialogue, broken down into sections, was read by the teachers with pauses for the students to repeat in chorus.

By this time the students had encountered the new structure several times through hearing, reading, and repeating examples of the structure. It can be said that through the repetition of the examples the subjects have been involved in repetition drills which are usually recommended as a first step in the drill-work by audiolingualists. However, it must be mentioned that in the IM lessons the students were allowed to follow the text in their workbooks as they were doing the choral repetition, which is not the normal way of doing repetition drills.

Another common technique of the audiolingual method, i.e. the memorization of the dialogue was not applied in the IM method. One reason was that it would hardly have been possible to carry out by means of "canned" lessons, and another that memorization is not recommended by the Official Curriculum. However, the absence of the memorization of the dialogue was, in some degree, counterbalanced by the above described procedure of dealing with it.

After the practice period the dialogue was read for a last time in such a manner that the teacher's voice represented one character of the dialogue while the students had the role of the other. The idea was partly to give the students the feeling that the text and practice were integrated parts of the lesson and partly to enable them to fully understand the dialogue in case they had not grasped every detail of it through the previous readings.

Choral reading was important in order to achieve an equal degree of participation in the lesson. Choral reading is encouraged by the Official Curriculum:

"In both oral practice and the treatment of a text, reading in chorus is an important element."

"Reading in chorus is used on the one hand on continuous passages of text (in intensive text reading), and on the other on those structures and phrases that all pupils should get practice in saying."

"Speaking in chorus should be used at all levels" (Lgr 69, p.7).

The Oral Pattern Drills were the core of the IM program. The presentation of the new grammatical feature through repeated reading of the dialogue in which it occurred was followed by extensive practice taking up the rest of an IM lesson. Practice usually began with oral work in the form of pattern drills. Because of the lack of explanations and comments on grammatical contents it was important to link practice with presentation in some other way so that the students would regard the exercises as meaningful and integrated parts of the lesson. This was to be achieved by the teacher quoting a sentence or two uttered by the characters of the dialogue and telling the students that in the exercises to follow they were going to practise similar sentences. In this way there was no need to state explicitly the actual aim of the drills.

Since oral pattern practice, serving the double purpose of elucidating and drilling new grammatical structures, formed the most essential parts of the IM lessons, we shall attempt to give a thorough insight into the stock of drills used in the lesson series, and the principles behind elaborating them. Before doing so, however, we shall deal with the theory, the characteristics, and the role of pattern practice in more general terms.

In Rivers' words types of exercises called pattern or structure drills "are designed to give the students many opportunities for systematic practice of particular features in naturally phrased and easily remembered foreign language utterances. Lexical items are limited in variety in order to concentrate attention on the grammatical features under study. In this way understanding of structural interrelationship (that is, of structural meaning) grows through use of structure, rather than through intellectual apprehension" (1968, p.99).

Although pattern practice in the above sense of the term with its numerous and ingenious varieties is a relatively new type of exercise, developed mainly after World War II, the basic idea goes back to the Direct Methodists who emphasized the importance of oral repetition.

The main functions of pattern practice are to eliminate interference from the native language and at the same time to develop automatic, habitual responses of second language structures. Drill work, therefore, is believed to be particularly efficient in the teaching of second language patterns that do not parallel those of the native language.

A look into any of the major audiolingual courses appearing in the U.S. in the late 1950s and in the 1960s reveals the dominant role of pattern drills in such courses. Some course producers, however, have incorporated pattern drill techniques in their programs without necessarily adopting other important features of the audiolingual method. This can be said about the modified direct method.

Careful study of what has been written about pattern practice reveals a great variety of opinions about the type, the amount, and the place of the drill, as well as about how pattern practice should be combined with other elements of language teaching. For lack of uniform guidelines on how to design and use drills, we have tried to follow the intentions of the Official Curriculum whenever possible and to respect those principles that seem to be generally accepted.

One important aspect of pattern practice, on which opinions seem to differ, is whether or not such practice should be made a mechanical activity. According to Grittner (1969a, pp.212-213) the selection of the type of pattern drill reflects two different views on the function of such practice. Adherents of the conditioning school are likely to produce drills that do not require significant changes--for example repetition drills, single-slot substitution drills, etc. In their opinion, as a result of such drills, if provided in adequate proportions, the structure will become a habit rather than a matter of intellectual choice. This view is reflected in a statement according to which pattern practice ". . . makes no pretence of being communication . . . [but is] . . . undertaken solely for the sake of practice in order that performance may become habitual and automatic" (Brooks, 1964, p.146). On the other hand, there are those who favor drills which require concentration and intellectual activity on the part of the student. To exemplify such practice Grittner gives some items of a transformation drill in which active sentences have to be changed to the passive.

Our principle when devising pattern drills for the IM lessons was to avoid engaging the students in purely mechanical exercises. One reason for this was that such drills never seemed to have gained popularity in Sweden and their use is discouraged by the Curriculum, which also emphasizes that exercises should fit naturally into the lesson and should have communicative value: "It is true in all practice of language skills that what is demanded of the pupils should have a natural connection with what the teacher has given as a starting-point. This can be achieved, for example, by means of the drill consisting of question and answer. . . . Even the content of the example should be such that the pupil feels that his answer has some communicative value. The above principles should contribute to more effective practice, a better understanding of the meaning of what is being practised, as well as to a learning situation which is not felt by the pupil to be mechanical" (Lgr 69, p.13).

Another passage of the Curriculum reveals not only bias against mechanical exercises but an obvious conviction that drills should be so devised as to promote insight into the structure of the language, in other words, cognition in an implicit way:

"The insight into the structure of the language which the pupils are to gain is achieved by the pattern practice being done in a systematic way. It must always be clear to the pupils what is changed or substituted in the drill they are doing" (Lgr 69, p.13).

"Further insight is gained by the structure being linked with real life, for example objects in the classroom, or with pictures or situations" (Ibid.).

Another reason for going in for non-mechanical drills was the growing criticism of such drills as well as some research evidence in favor of other types of pattern drills.

In a psycholinguistic experiment conducted by Oller and Obrecht (1968) two approaches to teaching grammar skills through the same pattern drills were compared. One group of students was taught with listening, repetitive and manipulative drills, while the other with question/answer and directed dialogue. The latter group was also deliberately made aware of meaning through translation, and drawings representing the objects referred to in the sentences. The results allowed the investigators to conclude that "the effectiveness of a given pattern drill is significantly increased by relating the language of that drill to communicative activity in the teaching/learning process" (p.174).

Gefen, who admits that "Both programming and the drilling of sentence patterns are useful teaching and learning techniques, along with many others" is of the opinion that "Now that most teachers accept the need for pattern practice and structural drill, the next step is contextualisation--placing the drill in a meaningful situation but without sacrificing the goal of automaticity" (1967, p.192).

Rejecting the idea of teaching the grammatical structures through mechanical drills, the oral drills incorporated in the IM lesson series were designed in accordance with two main assumptions: (1) relating pattern practice to communicative activity enhances the effectiveness of such practice, and (2) pattern drills requiring the students to concentrate their minds on what they are doing are more effective than those which can be performed mechanically.

In order to relate the drills to communicative activity the large majority of drills were based on pictorial aids. As a result most items referred to situations represented by drawings. Moreover most of the drills were designed on the question/answer basis or as directed dialogues. In these drills the stimuli and responses receive a more natural, conversational character than can be achieved in e.g. single-slot substitution drills where the student has to respond to one-word cues. This results in rather artificial exchanges.

Using non-mechanical drills and pictorial cues also contributed greatly to achieving the aim of keeping the students concentrated and alert throughout the drill period. In spite of the fact that drill-items were so devised as to eliminate ambiguity, the correct responses could be made only as a result of paying attention to either a pictorial cue or to the cue imbedded in the question-stimulus. "The desired variations of the patterns may be cued by the presentation of pictures or objects as a change from aural cues; this demands constant

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[1] According to Frey (1968) drills of the question-answer variety "are one of the teacher's most functional tools" (p.354, Note).

attention from the students and is an antidote to absent-minded participation" (Rivers, 1968, p.108).

The entire tape-script and pictorial material of lesson 9, included in Appendix 1, will give the interested reader a good idea of how some of the pattern drills were devised, introduced, and performed. The list of pattern drills in the same Appendix will give further information as to the entire stock of oral pattern practice incorporated in the IM lessons.

If we check the large majority of our drills against the principles of construction of drills presented by Rivers (1968, pp.103-104), we find that they correspond to 13 out of 15 principles listed here in an abbreviated version.

1. A drill series should provide considerable practice in the use of each element before moving on to the presentation of another.
2. Each drill should be concerned with one specific structural pattern, usually a pattern which contrasts with native-language habits.
3. The structural feature to be drilled will have been encountered already by the student, in a dialogue for example.
4. The pattern will be drilled consistently through a series of six or eight cue-response items.
5. Changes will be minimal.
6. Each item will be short.
7. Each item will be a complete utterance.
8. The cue will provoke only the desired response.
9. Vocabulary will be kept to a minimum.
10. Cue and response will be in the foreign language.
11. Drills will be conducted orally. For variety they may be used as reading or writing exercises, but not to the exclusion of oral practice.
12. Drills will not be purely imitative.
13. Drills will be varied in type to avoid boredom.

According to principles 14 and 15 drills should be followed by a testing phase, and provision should be made for the student to apply what he has learned in the drill: in directed dialogue, by question/answer, game, and report. For reasons embedded in the very experiment these two principles could not be respected in our lessons. The testing phase was, in our program, replaced by the post-test. Follow-up work in some form of free conversation was beyond the possibilities of our experimental lessons, since such activity requires a live teacher. In order to compensate for the loss of follow-up work recommended by Rivers we have used, throughout the lessons, drills which include conversational and communicative elements. The reason for including the last reading of the dialogue, in which the student was involved in a conversation with the teacher, was also an attempt at providing for a situation in which the student used the patterns in a natural context.

We are, of course, quite willing to agree with all those who emphasize the importance of a follow-up of the drill period with some activity in which the student may experience the value of the structure newly acquired through drill work. Providing for such a classroom situation is desirable both because of its pedagogical value and because of the teaching/learning effect of such activity. However, structure drill would not be justified if it were not considered in itself a powerful technique helping students to internalize grammatical structures. What we were interested in was exactly the value of the drills, whose main objective must necessarily be to bring the student to the stage where he is capable of applying new structures to communicative activity.

Since we were anxious to design the IM lessons as much as possible in the spirit of the Official Curriculum, we shall quote some additional recommendations which, we believe, were closely followed in the procedures of these lessons.

"Apart from repetition and pattern drills of the question/answer type, two further types of drill are used in systematic oral practice: substitution and transformation drills" (Lgr 69, p.7).

"An important aid in systematic oral practice is pictorial material of different types. Material for the overhead projector should especially play a large part here" (Ibid., p.8).

"Even if it is intended that the drill be an oral one, it is usually desirable that the pupils have one or more examples before them, on the blackboard, overhead projector, or flip-over. The teacher can then help the pupils to understand the aim of the drill by underlining or using different colored pens" (Ibid., p.13).

"Active practice must be carried out with the help of a large number of examples, often at least ten or so on each practice occasion. This also means concentration, so that not more than one, or a maximum of two new structures are presented in each lesson. The drill should not only aim at achieving an understanding of the pattern practised. For lasting knowledge overlearning is needed" (Ibid., p.14).

". . . with regard to more comprehensive linguistic items, it is advisable that the learning process be concentric. When going through the material for the first time the main type is practised, and its variants later" (Ibid.).

"The teacher´s questions should be formulated in such a way that incorrect answers are avoided" (Ibid.).

Finally, it must be mentioned that the Official Curriculum, too, emphasizes the importance of free exercises which are supposed "to give the students the feeling of really using the language, not only exercising it constantly" (Ibid.).

The characteristics of the drills used in the IM program can be summed up as follows: besides directed dialogue and transformation drills the majority of drills were of the question/answer type. Most of the drills were three-phase drills and consisted of 6 or 8 items, usually based on picture series or in some instances on single pictures. Four-phase drills were performed when there were no pictorial cues, or when the students´ responses were longer or more difficult. When pictures were used, the first stimulus and response were printed at the top of the transparency with the students' part clearly marked. Each drill was preceded by careful instructions and one or two items were modeled by the teachers.

In spite of some anxiety on the part of the investigators because of possible failure in engaging the subjects in drills, both the investigators and the observers could state with satisfaction that the entire IM program including the large amount of drill-work could be carried out successfully. The active participation of the subjects in the drills may be ascribed to their positive general attitude, to the fact that they received some training and exercise in pattern practice in the regular course before the experiment had started, and to the careful and detailed instructions in lessons 1 and 2. The characteristics of the drills such as non-ambiguous stimuli, pictures clearly conveying the cues, careful timing of the pauses, as well as the instructions at the outset of each drill were further factors to guarantee the successful performance of the drills.

Written Exercises in the IM lessons were assigned according to two main principles, respected whenever possible: written exercises, too, should be of the drill type, and should be given after oral work. These principles are clearly shared by the Official Curriculum according to which written exercises ought to "support the oral teaching as a final reinforcing exercise. This means that the written exercises will be of the same form and type as the oral exercises (Lgr 69, p.32). This is obviously also the principle of the writers of the A-LM courses: "Usually there is at least one Writing Drill for each of the grammatical points presented; it appears after the oral Structure Drills which it closely resembles" (1963, p.15). As for the value of written drills Rivers states that "The writing of drills not only gives valuable practice in accurate and correct construction of sentences but consolidates what has been learned orally" (1968, p.248).

In accordance with what has been said above, the written drills, incorporated in the IM lesson series, were devised so as to resemble preceding oral work, and contained items that could be done on the basis of the examples provided, through analogy. In some instances performing the written drills presupposed understanding of the pattern from preceding oral practice. The majority of the exercises were of the transformation and question/answer type, but in some cases we assigned fill-in exercises involving the crucial item, as well as two-choice exercises in which the students had to mark the correct alternative. The fill-in exercises were given mainly in order to vary the exercises by giving a short dialogue or other coherent text in which some of the crucial words had to be completed by the students.

Although the written exercises were not necessarily the last activity of a lesson, and were occasionally followed by one or two oral drills, they were usually introduced after considerable oral work on the grammatical point under study. The pauses provided for the written exercises were timed by the tape. When time was up, the investigator projected the key on the screen and the students were given adequate time for correcting their mistakes. When time permitted, the correct answers were read out by the teachers, providing the students with additional auditory experience around the pattern being drilled.

Repetition. The generally accepted idea about the necessity of repetition, whatever knowledge or skill is to be acquired, was also one of the guiding principles in the preparation of the experimental courses. Each lesson, therefore, began with a period of revising what had been covered in the preceding lesson. The revision section lasted for about 8 minutes per lesson, and in the IM lessons it usually comprised an oral and a written drill. The corresponding part of the first lesson was devoted to introductory information about the "Special Course".

What has been said about the oral and written drills in this section before is applicable to the drills constituting the revision period, too.

IM Lessons Described

For the sake of those who wish to gain a more complete insight into the lesson materials we have incorporated in Appendix 1 the entire tapescript and illustrative materials of both versions of Lesson 9. These will demonstrate what the students experienced throughout an experimental lesson auditively and visually.

Both versions of Lesson 9 can be considered typical representatives of the lesson series they belonged to, both with respect to the general layout and the time distribution to various activities.

Figure 3.14 gives a schematic presentation of the IM version of Lesson 9. The order of the various parts of the lesson and the time distributed to them were very similar in the other lessons, although Lesson 7 was organized in a somewhat different manner because of the shorter time allotted to patterns 3 and 4 (cf. Figure 3.13). Other deviations from the typical scheme were made mainly in order to adjust for time. Thus the first and/or last reading of the dialogue had to be cut out in some lessons.

ACTIVITY		TIME
MUSIC		2'
REVISION OF IM 8	ORAL DRILL Exercise 1	3'25"
	WRITTEN DRILL Exercise 2	3'10"
DIALOGUE	LISTENING with books closed with books open	3'
	WORDS AND EXPRESSIONS (CHORUS)	2'
	READING IN CHORUS AFTER MODEL	3'
ORAL DRILLS	Exercise 3 Exercise 4 Exercise 5	6'10"
MUSIC		2'25"
WRITTEN EXERCISES	Exercise 6 Exercise 7 READING OF CORRECT ANSWERS	9'05"
DIALOGUE	READING IN CHORUS (ONE PART)	2'10"
ORAL DRILL	Exercise 8	2'30"
MUSIC		2'45"

Figure 3.14 Lesson 9 (IM Version)

A comparison of Lesson 9 with the entire lesson series with respect to the distribution of time to the three main activities in the IM lessons is given in Table 3.21. The figures for the entire lesson series are based on Appendix 2, showing in detail the time allotment to the various activities in all lessons. In Table 3.21 we are dealing with net time only, i.e. the actual teaching time, not including music and other non-instructional activity.

Table 3.21 Time Allotment to the Three Main Activities in the IM Lessons

Activity	Lesson 9		Entire Lesson Series	
	Minutes	Percentages	Minutes	Percentages
Dialogue	10'10"	29 %	84'	26 %
Oral Drills	12'05"	35 %	128'	39 %
Written Exercises	12'15"	36 %	114'	35 %
Actual teaching time	34'30"		326'	

The proportion of the time allotted to oral work happened to be smaller in Lesson 9 than in the entire lesson series. It ought to be mentioned that additional aural activity was included in the written exercises, since the correct answers were often read out aloud by the teachers at the end of such exercises. However, as this activity was part of the written exercise, and constituted merely auditory experience, we did not find it justified to include it in the table as oral drills.

In conclusion it ought to be mentioned that according to observers and the investigators themselves the entire IM lesson series proved successful enough to attract the subjects' attention and to engage them in oral and written work. However, in order to get an idea of their appreciation of the lesson series one has to look into the results of the Attitude Test (see Chapter 4).

The IM Method and Other Habit-Forming Methods Compared

After having given a thorough account of the IM method, its underlying theory, and its reflection in the principles and procedures of the IM lesson series, it will be well to sum up the points of relationship between this somewhat artificial experimental method and some well-known methods frequently referred to throughout the present section, namely the direct method, the audiolingual method, and the modified direct method.

Although the IM method has no claim to be regarded as the embodiment of any of these methods, with respect to its behavioristic position it does share some fundamental characteristics with them. Since the experiment involved a purely habit-forming approach to grammar teaching, its findings must be of major interest to advocates of methods which reflect a mechanistic view of language acquisition and which, consequently, rely heavily on habit-forming procedures.

It has been pointed out in this study before that the direct method is based on the belief that second language learning is similar to native language acquisition, which is thought to be a process of developing language habits through constant audio-lingual training, mainly at the imitative and repetitive level. Since in the learning of the first language there is no interference from any previous language habits, second language teaching should attempt to reproduce this kind of ideal language learning condition, i.e. the "tabula rasa" condition of the infant's mind, which is thought to be achieved by isolating the native language through using direct association and monolingual teaching techniques. Selection and gradation of linguistic material, e.g. grammar, is lacking in the direct method, and the sequence of the matters to be taught is determined more or less by random occurrence.

It is on this point that the IM method, presenting and practising grammatical structures according to a carefully graded and selected program, differs essentially from the direct method. However, there are a number of other characteristics shared by both methods, such as the exclusive use of the target language, predominance of audio-lingual activity, and emphasis on imitative and repetitive teaching techniques. To some extent the IM method also uses direct association by relating grammatical structures to situations represented in pictures, thus eliminating the native tongue as a vehicle to convey meaning.

A comparison of the IM method with the audiolingual method shows considerable likeness between the two methods in that they proceed in the teaching of grammatical structures along a carefully outlined path: the grammatical content to be taught is limited to one or two points at a time and is graded according to the principle of moving from the simple toward the complex, and in that this carefully selected and graded grammar is internalized by means of intensive habit-forming techniques, primarily oral drilling. However, the audiolingual method, or at least most of the courses identifying themselves with this method, do make use of the native language to convey meaning, which is thought to be a more effective and easier way than direct association. Interference from the native tongue is counterbalanced by concentrating emphasis on critical phenomena rather than by attempts at totally isolating the native tongue. The first difference between the two methods, then, is in their attitudes toward the use of the native tongue. One characteristic of the audiolingual method, absent in the IM method, is that, although both methods apply the inductive approach, the audiolingual method usually recommends grammatical generalizations, i.e. concise but explicit summaries or rules about the grammatical points under study, formulated in simple terms in the native language. Finally, dialogue memorization --another common technique in audiolingual courses--is not utilized in the IM method.

The method reflecting the intentions of the Official Curriculum, which we call the modified direct method in this study, shows, for obvious reasons, the greatest overlap with the experimental method. It was intentional that the IM method was devised so as to reflect the audio-lingual habit theory in an interpretation that resulted in the Lgr 69, Supplement English. There can be hardly any doubt that the authors of the Curriculum stood on the same theoretical grounds as are expressed in Carroll's audio-lingual habit theory. However, there is no knowing what the theoretical considerations behind the details of this method are. Since it reflects a more rigorous position with regard to explicit explanations and the use of the mother tongue as a conveyor of meaning, and is more sceptical toward mechanical drills than the audiolingual method, we are inclined to classify this method as a compromise between the other two methods, adopting features of both but fulfilling the criteria of neither. A possible explanation of the fact that the modified direct method is more restrictive with respect to the use of the mother tongue and to explanations than the audiolingual method may be that while the latter originated in the USA,where foreign language courses are offered mainly at the upper level of the high school and at college, the modified direct method recommended in the Swedish Curriculum is to be applied for a course of English which begins at an earlier age and lasts for a longer period. Moreover foreign language students in the United States are a select group while the learners of English in the Swedish compulsory school comprise the entire population of these age groups. Therefore, a method making restrictions as to grammatical explanations in favor of direct association, and recommending non-mechanical practice techniques, is seemingly justified with regard to the students to be taught by this method, but cannot be taken for granted until substantiated by research findings.

Analysing the IM method we can find no features in it that are contradictory to the ideas of the Official Curriculum. Nevertheless we are quite willing to agree that most course producers or teachers would probably recommend modifications in our course according to their own interpretation of the Curriculum.

Summary

Figure 3.15 is an attempt at illustrating the positions of the above methods with respect to some important aspects of language teaching determining the profile of a method. The positions of these methods along the continuums are, of course, approximate.

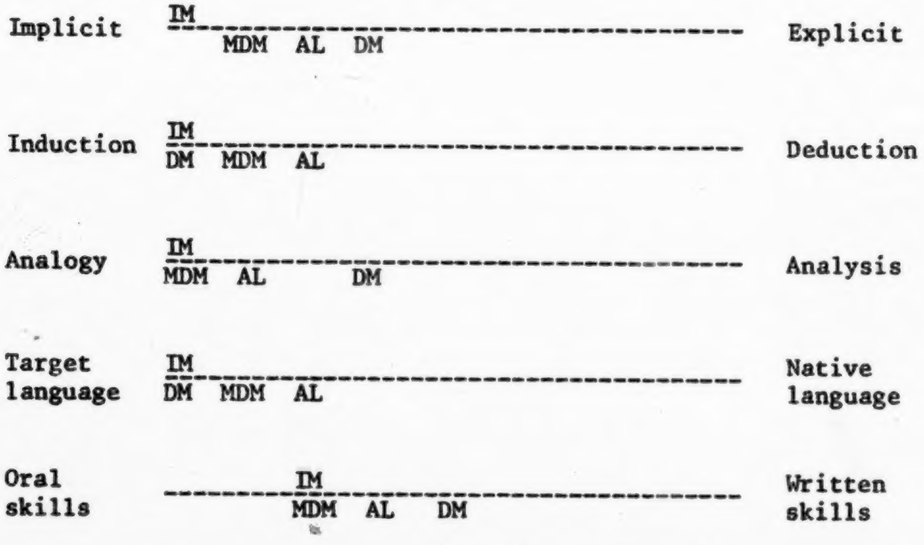

Figure 3.15 The positions of the implicit method (IM), the direct method (DM), the audiolingual method (AL), and the modified direct method (MDM) with regard to some aspects of language teaching.

The degree of similarity between the experimental method and any other method is, we feel, of secondary importance. If the IM method can be said to fall in line with the audio-lingual habit theory and correspond to requirements that make a method acceptable for real classroom teaching, it should qualify for the purposes of this research as an experimental method.

3.5.2 The EX Program

Theoretical Background and Statement of Principles

The instructional strategy of the EX program is based on the cognitive code-learning theory of second-language acquisition formulated by Carroll (1965, p.278):

> According to this theory, learning a language is a process of acquiring conscious control of the phonological, grammatical, and lexical patterns of a second language, largely through study and analysis of these patterns as a body of knowledge. The theory attaches more importance to the learner's understanding of the structure of the foreign language than to his facility in using that structure, since it is believed that, provided the student has a proper degree of cognitive control over the structures of the language, facility will develop automatically with the use of the language in meaningful situations. . . .
>
> According to the cognitive code-learning theory . . . the differences between the native language and the target language should be carefully explained to the student, so that he may acquire conscious control of the target language patterns.

This theory, in turn, can vaguely be related back to "certain contemporary Gestaltist movements in psychology which emphasize the importance of perceiving the 'structure' of what is to be learnt" (p.280). It also bears resemblance to traditional rationalist thinking, which attaches great importance to the innate capacities of the human mind.

With this broadly defined theory as a basis the EX method was developed to serve as the other major variable in the experiment. Fundamental guiding principles, derived from the cognitive code-learning theory of language learning, were laid down and followed throughout in the production of lessons. To some extent the principles were also determined by specific restrictions placed on the experiment, as stated in (4) below. From this it follows that the EX method does not necessarily conform to any other teaching method, traditional or modern, as recognized by experts. On the other hand it should also be pointed out that instruction was intentionally linked up with teacher experience and empirical evidence wherever experimental constraints did not hinder this. Various practices used in the history of language teaching were employed, including currently less favored elements such as grammatical explanations, translation into and out of the target language, and comparison with the source language (contrastive analysis[1]). The only requirement was that they should not violate experimental restrictions.

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[1] This term will be used with reference to the instructional technique in which comparisons are made between words and structures in the native and foreign languages.

The basic principles adhered to were as follows:

(1) Lessons were to be characterized by an "intelligent" approach to teaching, in keeping with the cognitive code-learning theory formulated by Carroll. "Intelligent" in this respect is meant to imply that attention was drawn to reasoning and cognition as productive means of acquiring language skills. The assumptions underlying the strategy are, firstly, that cognitive control of the grammatical structure of the language will facilitate the acquisition of functional skills, and secondly, that the student´s motivation will increase if he knows and understands what he is doing. Such an "intelligent mental set" can usually be instilled into the student by showing him how formal language properties and structural relationships can be put to meaningful use in the learning process. Below we will show how this was attempted in the various phases of each lesson.

(2) Contrastive analysis of grammatical structures was to be made a regular feature of the EX lessons, that is, the foreign language grammar was to be compared with the grammar of the native language. According to the theory this will improve the student´s command of the foreign language.

(3) The learner´s knowledge of the source language was to be exploited. Therefore Swedish was to be used (a) as an expedient vehicle for information, which was essential for the promotion of understanding, and (b) as a linguistic reference system already known to the subjects.

(4) For experimental reasons a clear distinction had to be maintained between the two treatments with regard to habit-forming practices, and consequently the EX program was to avoid activities that would normally be classified as structure drills or pattern practice. By exclusively using the drills in the IM lessons it was assumed that the basic question of the investigation could be answered with a greater degree of certainty.

(5) As the two lesson series were to be equivalent to each other as regards contents, the EX program was not to contain material that had not been included in the IM program. Vocabulary, patterns and practice sentences used in an EX lesson were taken from the corresponding IM lesson. Generally, the EX lessons were to deviate from the IM lessons only with respect to mode of presentation and frequency of practice on each individual pattern.

Instructional Strategy

In accordance with the underlying learning theory the salient feature of the EX lesson series was its emphasis on cognition, mainly through explicit verbalization of structural relations. Several pedagogic techniques and devices were used for this purpose, usually in combination and interaction with each other; below we will describe the main ones and state reasons for their inclusion. The different means and ends will be dealt with under one heading, although one should not, as

Apelt (1969) has pointed out, confuse the notion of cognition with any of the instructional practices, such as translation and use of the mother tongue, that have been used in conventional language teaching.[1]

Explanation of Grammar. The chief means resorted to in order to promote cognition was grammatical explanation. Numerous authorities have advocated this technique, claiming that it is an essential ingredient in effective language-training for adolescents and older learners. Discussing the oral-aural approach Agard and Dunkel (1948) explain: "The adult learning to use a second language differs from a child learning his native tongue in that he can, theoretically at least, bring his intellect to bear on his problem and can speed up his learning process immeasurably through generalizations, short-cuts and insights into the way the language operates, if and when he understands its structure analytically" (p.282).

Stressing the difference between young and old learners Ausubel (1964) similarly attaches importance to the adult students´ analytic power and maintains that "in learning the structure of a new language--both in comprehending oral and written materials and in speaking--they can make conscious and deliberate use of grammatical generalizations and can explicitly apply them to suitable exemplars" (p.421). Titone (1965) points out that the older learner can capitalize on his "greater intellectual maturity that enables him to grasp more easily the general features and the abstract schemata of the new grammar. His maturity and his previous linguistic experience facilitate insightful learning of the new code" (p.7).

Recently statements have been made which seem to reflect a fairly widespread opinion among experts, namely that grammar need not, or should not, be restricted to adult learning only. In the view of many teachers, according to Grittner (1969a), "the psychological loss resulting from brief English explanations is more than compensated for by the fact that such explanations tend to minimize the danger of implanting a serious cultural or grammatical error in the student´s mind" (pp.165-166). Stern (1970) makes the remark that "There is nothing wrong with rules and grammatical explanations as such, what has often been at fault was the kind of rule offered and the insufficient amount of appropriate practice" (p.55), and goes on to say that "for the purpose of teaching languages in schools a small number of functionally helpful grammar terms and rules is . . . justifiable and quite adequate." Berkenkamp (1969) gives a similar interpretation of the situation: "Audiolingualists realized that generalization and explanation did not have to imply mere empty paradigm recitation. Their over-reaction against rules in the beginning was precisely because traditional language teaching had overused them. Experienced teachers presented valid arguments to support their contention of the usefulness--without over-use--of rules" (p.6).

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[1] Apelt (1969): "Allerdings darf der Grundsatz der Bewusstheit im Sprachunterricht nicht etwa mit dem Prinzip des Übersetzens und ständigen Gebrauchs der Muttersprache verwechselt werden, . . ." (p.17).

The use of grammatical explanations can also be justified on empirical grounds. Studies by Chastain and Woerdehoff (1968), McKinnon (1965), Xiem (1969) and others offer quite substantial evidence in their favor.

The Order of Explanations and Practice. In the experimental lessons the explanations were combined with deductive procedures and use of the native language. For our purposes the term deductive procedure will simply be defined as the instructional technique by which explanations, rules or generalizations are given before main practice of the pattern, i.e. before the main learning has taken place; inductive procedure, in the same unconventional terminology, can then be defined as the technique whereby explanations, rules, or generalizations are either not given at all, or given only after main practice of the pattern.

The opinion that explanations should precede functional practice is not uncommon among theoreticians and practitioners. Ausubel (1964) is convinced that discovery learning is "exceedingly wasteful and unnecessary", especially for older learners. "It takes a long time to discover grammatical rules autonomously and inductively . . . Deductive use of grammatical generalizations, on the other hand, is decidedly more efficient in second-language learning" (p.422). Discussing direct method theory Harding (1967) mentions that it advocates the inductive teaching of grammar: "This again may have been more a reaction against bad methods of teaching than a theory formulated for its own sake. Those who have seriously tried to teach grammar inductively will know how long it takes and how uncertain it can be" (p.54).

The main reason for choosing the deductive approach was that it clearly breaks with habit theory principles, which was desirable from the experimental point of view. Furthermore, objective research results suggest that the inductive discovery process is less efficient in language learning than in certain other disciplines. Recent experiments have, in fact, shown that deduction can be a more fruitful strategy than induction.

The Role of the Native Language. The native language was used in the explanations in order to secure maximal understanding of the exposition. Several experts have commented on this practice in language teaching. Ausubel (1964), for instance, asserts that "it is both unrealistic and inefficient for the older student to attempt to circumvent the mediating role of his native language when he is learning a second language" (p.422). Research evidence does not contradict this proposition.

The source language was also utilized for the purpose of comparison with corresponding structures in the target language. The hypothesis was that the learner can profit by his previous knowledge of a language, and that this asset outweighs the possible adverse effects that might result from using two different linguistic systems concurrently with each other. It can be said that the contrastive analysis technique rests on the theory that the positive transfer effects are stronger than the negative effects if and when the differences in structure between the languages are clearly mapped out. Once perceived, such relationships have high positive transfer value, according to Gestalt theory of learning.[1]

There is, however, no common agreement on the appropriateness of the contrastive approach in second-language teaching, and research evidence is meagre. Moulton (1966) expresses the opinion that "every adult learner must be made aware of precisely the differences between English and the foreign language he is learning, and that a good deal of his learning time should be spent in practicing just these differences" (p.7). Jakobovits (1968) is less positive: "Contrastive analysis of grammatical structure would not seem to offer particular advantages beyond those provided by verbalization of grammatical relations and by attention to a grammatical distinction at a time of saliency . . . " (p.105). "On *a priori* grounds we would expect negative transfer as much as positive transfer, assuming that transfer is relevant to the problem" (p.103). Experience from teaching English to native speakers of Hindi leads Green (1970) to think that "Contrast and comparison with the mother tongue might . . . seem the simplest way of helping pupils understand and remember a difficult structure" (p.220). The view is shared by Nickel (1970), a leading expert on applied contrastive linguistics: "Such comparisons within the framework of traditional grammar have turned out to be quite useful for pedagogical purposes, especially for age groups where cognitive learning is widely spread" (p.17). Bull (1971), finally, asserts that "The second language learner learns faster and with less frustration when he is thoroughly conscious of the points of identity and difference between his own language and the one he is learning" (p.450).

Before taking a closer look at the lessons we will also comment briefly on the use of translation. It was for centuries the predominant feature of all foreign-language study, but its value has been questioned from time to time, for instance by the direct methodists around the turn of the century, and also more recently by linguists of the structural school and others. Bloomfield (1933) was of the opinion that "Translation into the native language is bound to mislead the learner, because the semantic units of different languages do not match, and because the student, under the practised stimulus of the native form, is almost certain to forget the foreign one" (p.505). The technique also became increasingly discredited with advances in educational psychology and with the shift of emphasis in the schools toward more functional language skills. Further the development of modern technical aids such as the over-head projector and the language laboratory, which made it possible and convenient to try new modes of language-training, gave impetus to the reaction against traditional word-by-word translation of texts and other activities of disputed merit.

Still, the practice of translation is not entirely indefensible, according to some authorities. Belyayev, Professor of methodology in the

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[1] Hilgard and Bower (1966), p.258.

University of Moscow, takes the view that the grammar-translation method and the direct method are both inadequate, but "whilst protesting against the formalistic study of a foreign language, such as is characteristic of the grammar-translation method, we must consider translation to be one of the aims of teaching" (Belyayev, 1963, p.164).

Today Belyayev´s view seems to represent a minority opinion among experts. The development of modern language teaching methodology, under the influence of Skinnerian learning psychology, has led to an almost complete rejection of translation, especially as a practice technique, but its proper role in second-language instruction needs to be assessed further. We can agree with Lado (1964), himself a convinced critic of the technique, that "There is insufficient evidence for or against the use of translation to convey the meaning of what is taught or as a means to check comprehension" (p.54).

The rapid advances in linguistics through transformational generative grammar and ensuing speculations about its implications for second language teaching has sometimes led to the proposition that translation should be reinstated as a pedagogic technique in the classroom. Kandiah (1970), for example, taking examples from Tamil, demonstrates how transformationally derived translation exercises can be implemented in actual practice. The scientific justification for such claims seems, as yet, rather tenuous, but further research might very well open up new prospects.[1]

In this country the use of translation in foreign language instruction was first severely criticized by Hjelmström (1959), who maintained that it is not only unpedagogical and unsound in principle but also downright detrimental in practice: "The translation method is thus inferior to the monolingual method in all important respects, and what is more, it is also downright detrimental" (p.18).

Several statements and official measures in the same vein followed during the 1960s, interrupted by occasional teacher protests and theoretically founded criticism concerning the lack of empirical justification for the far-reaching changes in educational policy on this point.

The Lessons

In this section we will give a more detailed account of the lesson procedures. The division into headings is not a natural one, since the different techniques were deliberately combined with each other, so as to form rounded and integrated instructional sequences. Thus, for instance, the explanation was never presented as an isolated element in its own right, but occurred regularly in the various training phases.

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[1] In a recent paper Reinertsen Lewis (1972) discusses in more detail the significance of transformational grammar for foreign language teaching.

The Dialogue. The dialogue was usually treated in the following way. First it was read aloud by native speakers; the students were asked to follow the text carefully in their workbooks. Then the Swedish teacher indicated the topic of the lesson, either by translation of crucial sentences or by explicit statement of what was to be learnt. Students were often directed to underline typical instances of the grammatical structure in the text; sometimes they also wrote the corresponding Swedish word or phrase above the line. Fairly detailed verbal descriptions, sometimes supplemented with projector transparencies, were provided, which aimed at giving the students a clear picture of the syntactic characteristics of the structure. The theoretical exposition was always combined with some practice, for instance in the form of choral repetition of suitable sentences, or individual translation exercises in which the students were to formulate proper English sentences using the new grammatical pattern. The correct response was always supplied after a few seconds. Following this initial presentation of the grammar the dialogue was read once more by the native speakers, this time with pauses so that the students could repeat in chorus.

The dialogue was also frequently referred to in the other phases of the lesson, particularly when additional explanations and clarification were needed. Many oral translation exercises used phrases in the dialogue as a starting-point.

This routine treatment of the dialogue was roughly followed throughout in the EX program with minor changes from lesson to lesson for the sake of variation. In three lessons (EX 8, 9, and 10) there was a second choral reading of the text; the class and the native speaker read alternate parts.

The Explanations. For reasons stated above the explanations were conveyed in the source language, i.e. Swedish;[1] contrastive comparisons between structures of the source and the target language were made a regular feature. Other distinguishing characteristics will be described below.

For grammatical explanations to be worthwhile and effective in language teaching they must be of a functional kind, i.e. they must serve the sole purpose of facilitating functional, insightful practice of the structure. Therefore formal grammar, as well as complicated terminology, were avoided to the largest possible extent, whereas many unconventional devices judged as appropriate means of furthering understanding were employed. A consistent attempt was made at letting the students experience the structures through different sense modalities. Whenever possible the students were given the opportunity to hear, see, say, and write a suitable number of examples of each pattern. This strategy goes well with psychological learning theory: "The more kinds of association that are made to an item, the better is learning and retention" (Carroll, 1965, p.280).

The explanations were given only after the students had met the pattern in context, usually in the dialogue. The Swedish voice focused the students´ attention on sentences in the text exemplifying the structure, for instance by asking them to underline the phrase or to write the Swedish counterpart above the line. Characterizing features were emphasized, and translations were given. Differences and similarities between the languages were carefully pointed out and explained. Projector transparencies with pedagogic arrangement of items helped the students conceptualize the patterns visually. The transparencies were made maximally instructive by means of pictures, arrows, use of colors, underlining of crucial words and endings, etc.

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[1] One subject was a native speaker of Finnish, but she was also fluent in Swedish.

It should be stressed that the grammar was not of the traditional "rule-and-paradigm" kind. The students were mostly taught to look out for formal syntactic properties that could guide them to correct use of the target language structures; the term generalization would in some cases be more telling than grammatical explanation. Even so, a minimum of rules and terminology were inevitable. The directions given concerning the structure Preposition + gerund, for instance, although basically quite simple and straightforward, needed the use of two abstract concepts:

> "After words like of, in, at, about--called presspositions--
> English verbs take the ending -ing."[1]

Grammatical terminology was not known by the subjects before the experiment; terms needed had to be taught along with the subject matter of the lesson. In all some ten such abstract concepts were used in the program.

One further aspect of explanation in language learning is its relation to functional practice. When not related to a functional linguistic context any explanation is bound to be mere mental exercise without much relevance to the learning of language skills. Therefore, upon every instance of clarification, students were given immediate practice of the structure, usually with stimuli in the source language, which gave them the opportunity to apply their insight instantly on a functional level. Within each sequence of lessons on the same topic there was also a very careful grading of the material to be learnt, so that easy matter was explained first. Then the explanations moved to more complicated problems in small steps, each followed by application exercises. Massive and disconnected instructions tend to dull the learner and make him inattentive.

The Oral Exercises. The EX program contained less oral activity than the IM program, as it was hypothesized that the development of speaking skills does not exclusively depend on repetitive oral practice with the language patterns. In conformity with the underlying theory the EX method also attaches more importance to insightful practice with relatively few examples of each structure, than to rote practice with an abundance of examples without knowledge of the grammatical relations involved.

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[1] This, of course, is only a summary of the explanations. It was elaborated further in the lesson.

Oral activities in the EX lessons were of the following kinds:

- Chorus reading of new words and phrases in the dialogue
- Chorus reading of the dialogue
- Chorus reading of sample sentences projected on the screen or selected from the dialogue. This was usually done in connection with the explanation of grammar.
- Individual formulation of utterances in English from Swedish cues
- Chorus reading of correct answers to written exercises
- Songs. (Only few joined in).

The rather narrow range of oral activities was due to experimental restrictions. The EX lessons could not make use of pattern practice type of exercises, nor could they, quite naturally, comprise more meaningful communicative activities or free oral production. This limitation would, no doubt, strike the neutral observer as a major defect of the program; however, it must be borne in mind that the EX method in its present form cannot be evaluated in terms of applicability to the everyday classroom situation, since it represents a test instrument rather than a full-blown teaching method. More up-to-date practice methods would inevitably have violated experimental constraints. Finally, one of the aims of the investigation was to find out whether facility in speaking the language will develop in spite of the limited time spent on oral-aural practice.

The main opportunity for the students to produce English sentences on their own was given in connection with explanation of grammar. The teacher gave a stimulus in the source language on which to respond in the target language. This kind of exercise was performed on an individual basis: the students were exhorted to formulate the English utterance by themselves in the brief pause that followed the directions. After a few seconds the native speaker read the correct English form and the students repeated in chorus, sometimes immediately after the model and sometimes after a few examples had been practised. The sentences were usually projected on the screen, the stimulus first and the appropriate response after the pause just as it was read out by the native speaker. Crucial features were sometimes marked in color or put within a frame to facilitate a visual conceptualization of the pattern. Ideally, then, the students first 'vocalized' the English form individually, then, as a reinforcement, they heard the correct version from the recorder and saw it spelled out on the screen, and finally they pronounced the utterance once more in chorus after the native teacher. As mentioned earlier, additional 'referential support' was provided by drawings depicting the situation expressed in the practice sentence.

The Written Exercises. The written exercises, like the oral exercises, were designed to fit the general restrictions placed on the experiment. Exercises incompatible with the cognitive theory, such as repetitive practice of patterns, were avoided, while exercises incompatible with the audiolingual habit theory were favored. In practice this meant that the EX lessons had to rely mainly on translation and fill-in tasks, neither of which is an ideal form of exercise. In most written exercises the target language structures were compared with corresponding source language structures. Again, as with the oral exercises, pictures were used in order to make the practice "situational".

Written work was done after the grammar had been dealt with orally. Usually ample practice had been given--through dialogue reading, explanations, and oral translation exercises--before the students were left with written work on their own. In addition to this the Swedish teacher often introduced the written exercises with a brief recapitulation of earlier explanations, and also helped with the first few items. The intention was to make the students understand what they were doing, so that they did not engage in mere guesswork. In the same manner as with other activities learning with insight was aimed at, that is, writing practice was given only when the students were consciously aware of the grammar it involved.

In all, thirty written exercises occurred in the EX program, or three on an average in each lesson; lessons 1 and 4 contained two and four exercises, respectively. Twelve of the exercises were of translation type, or rather fill-in translation type, as there was not time enough for translation of whole sentences. Crucial parts of the English sentences were omitted, and cues were given in the native language, either in the form of single words and phrases underneath the slots to be filled in, or in the form of complete utterances to the right of or above the incomplete English sentences. The practice items were nearly always picked from the corresponding IM lesson. Care was taken to vary the sentence patterns within each exercise, so that a drill-like situation was not created; instead an analytic/selective approach to practice was required of the learner.

A few monolingual exercises gave a list of words to be inserted in a brief dialogue or in question-answer exchanges. There were also six transformation exercises in which the students were asked to rewrite sentences according to given instructions. These last two types of exercises were common to the two programs. It is important to remember, however, that they were very differently introduced and performed: EX students presumably worked after an analytic fashion as a result of preceding training and instructions, whereas IM students had to rely on their ability to form analogies on the basis of previous exposure to an abundance of exemplars.

After the introduction of an exercise there was a pause during which students completed remaining items. When time was up, a transparent copy of the workbook page was shown on the screen for a minute or two. The correct answers, in block letter typing, were marked in yellow to make the correction of mistakes quicker. Soft music was played to call attention to the screen. Usually the majority of the students had finished the exercise before the key was shown. The slower students completed the exercise with the help of the model.

Sixteen exercises were rounded off by reading in chorus of the correct answers.

Inspection of the workbooks after each experimental lesson showed that written work was usually very satisfactorily done. Mistakes had regularly been erased and corrected.

An EX Lesson Described

To give the reader a more precise idea of how a typical lesson worked, how much time was allotted to the various activities, and what teaching materials were used we shall describe lesson EX 9 in detail.

Figure 3.15 gives the design of EX 9. Following the usual routine there was first a revision part with a short recapitulation of matters dealt with in the preceding lesson (EX 8), then followed presentation of the dialogue and introductory explication and practice of the new material. After the intermission with music there were further explanations and practice, and finally a second reading of the dialogue in which the native speaker and the class read one part each. Total running time for lesson EX 9 was 42 minutes, including music.

ACTIVITY		TIME
MUSIC		2'00"
REVISION OF EX 8	EXPLANATIONS COMBINED WITH ORAL TRANSLATION EXERCISES	3'30"
	WRITTEN EXERCISE NO. 1	3'20"
DIALOGUE	DIALOGUE READ BY NATIVE SPEAKERS	1'50"
	TRANSLATION OF SELECTED PASSAGES EXPLANATIONS AND ORAL TRANSLATION EXERCISES	5'45"
	READING IN CHORUS AFTER MODEL	3'10"
MUSIC		2'50"
FURTHER EXPLANATIONS AND PRACTICE	WRITTEN EXERCISE NO. 2	2'40"
	READING IN CHORUS OF ANSWERS	40"
	EXPLANATIONS AND ORAL EXERCISES	4'55"
	WRITTEN EXERCISE NO. 3	5'00"
	READING IN CHORUS OF ANSWERS	2'00"
DIALOGUE	READING IN CHORUS (ONE PART)	2'00"
MUSIC		2'00"

Figure 3.15 Lesson 9 (EX Version)

In Table 3.22 a comparison has been made between lesson EX 9 and the entire lesson series with regard to time distribution over the four main activities that can be identified in the EX program.

Table 3.22 Time Allotted to the Four Main Activities in the EX Lessons

	Lesson 9		Entire Lesson Series	
	Minutes	Percentages	Minutes	Percentages
Explanations	8	23	74	23
Dialogue reading	7	20	57	17
Oral exercises	6	17	73	22
Written exercises	14	40	124	38
Actual teaching time	35		328	

The figures are approximations, as it has not always been possible to distinguish exactly between the different elements of the lessons. As can be seen EX 9 conforms quite closely to the average for the entire series.

Appendix 1 offers a complete description of the lesson procedures and materials. The tapescript is an exact rendering of everything that was uttered by the teachers. It also includes the instructions to the teacher operating the tape recorder and the projector (to the left), and the time elapsed from the start of the lesson (to the right).

3.5.3 A Comparison Between the IM and EX Programs

To conclude the description of the experimental methods and lessons we shall first give a concise characterization of the two programs, presenting the essentials of what has been described in detail above. Then we shall make a comparison between the treatments on some specific points.

The IM program--devised so as to reflect the audio-lingual habit theory (see p.3:32)--carried the following characteristics: the new grammatical structure was introduced in a dialogue and was subsequently taught by means of carefully structured oral and written pattern drills; the assumption was that the students would internalize the grammar inductively through a process of habit formation for which the basis was provided by the numerous examples of the drills. The native language was almost entirely eliminated in the teaching process and the predominant feature of the treatment was audio-lingual activity.

The EX program was built on the cognitive code-learning theory (see p.3:50), according to which conscious awareness of structural relations plays an important part in foreign language acquisition. Consequently the grammatical structures were carefully explained and comparisons were made with corresponding patterns in the source language. Written exercises, mostly of translation and fill-in type, were given after the students had been acquainted with the grammar through explanations and oral translation exercises. Practice of the pattern drill type was avoided.

Common Characteristics

Since the experiment investigated two instructional techniques with the same goal, the two lesson series had a great deal in common: the basic texts (dialogues) presenting the new grammar, the vocabulary, pictures for illustration, music, format of workbooks, and duration of lessons. The majority of sentences used in the exercises were the same; one third of the written exercises were identical, or almost identical. The recording facilities, as well as other technical equipment utilized, were also equal in quality. Neutral observers have testified that there was no noticeable dissimilarity between the lessons as regards quality of materials or functioning in class.

In general, the contents and materials can be regarded as comparable; the two series of lessons differed only in mode of presentation and practice of the subject matter.

Differences

The following is an attempt at systematizing the points on which the two treatments differed essentially.

(1) Explicit explanations and rules were totally absent in the IM lessons, while they constituted a fundamental element in the EX treatment.

(2) Insight into the foreign language structure was to be achieved through an inductive approach in the IM program, and through a deductive approach in the EX.

(3) Teaching procedures in the IM lessons--both the drills and the repeated readings of the dialogue--were intended to facilitate habit formation through analogy. In the EX method the teaching procedures were to provide insight into the language through an analytical process.

(4) The teaching time of the IM lessons was distributed to three main activities: dialogue reading, oral drills, and written drills. In the EX lessons, in addition to dialogue reading, oral and written exercises, there were also explanations. The proportions of the various parts of the lessons as compared to the entire teaching time are shown in Figure 3.16.

(5) The IM program can be characterized as a practically monolingual course, whereas the EX treatment made extensive use of the native tongue not only for explanations, but also in the exercises. According to a rough estimate the use of the target language in the EX lessons amounted to not more than 60 % of the entire teaching time (Figure 3.17).

(6) Involvement in audio-lingual practices was the dominating activity in the IM lessons, whereas in the EX lessons it had a less prominent position (Figure 3.18).

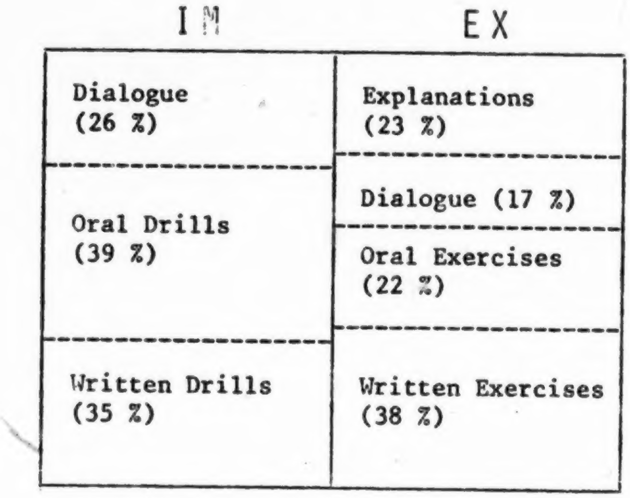
IM
EX
Dialogue (26 %)
Oral Drills (39 %)
Written Drills (35 %)
Explanations (23 %)
Dialogue (17 %)
Oral Exercises (22 %)
Written Exercises (38 %)

Figure 3.16 A comparison of the two experimental lesson series with regard to main activities

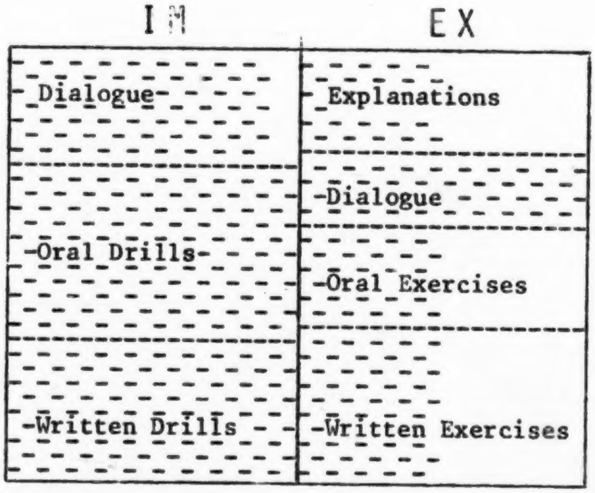
IM
EX
Dialogue
Oral Drills
Written Drills
Explanations
Dialogue
Oral Exercises
Written Exercises

Figure 3.17 A comparison of the two experimental lesson series with regard to the use of the target language (shaded)

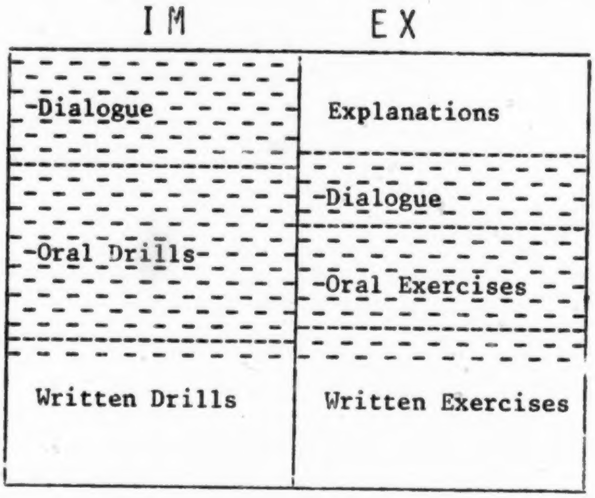
IM
EX
Dialogue
Oral Drills
Written Drills
Explanations
Dialogue
Oral Exercises
Written Exercises

Figure 3.18 A comparison of the two experimental lesson series with regard to audio-lingual activity (shaded)

On the basis of the above comparison the two experimental methods can be placed into a number of continuums representing various aspects of language teaching. In this way a method profile can be obtained for each method (Figure 3.19). Since the placement of any method into such a scheme cannot be but approximate, this juxtaposition of the two methods is meant to bring out their extreme characters and their relationship to each other rather than to characterize them in exact terms.

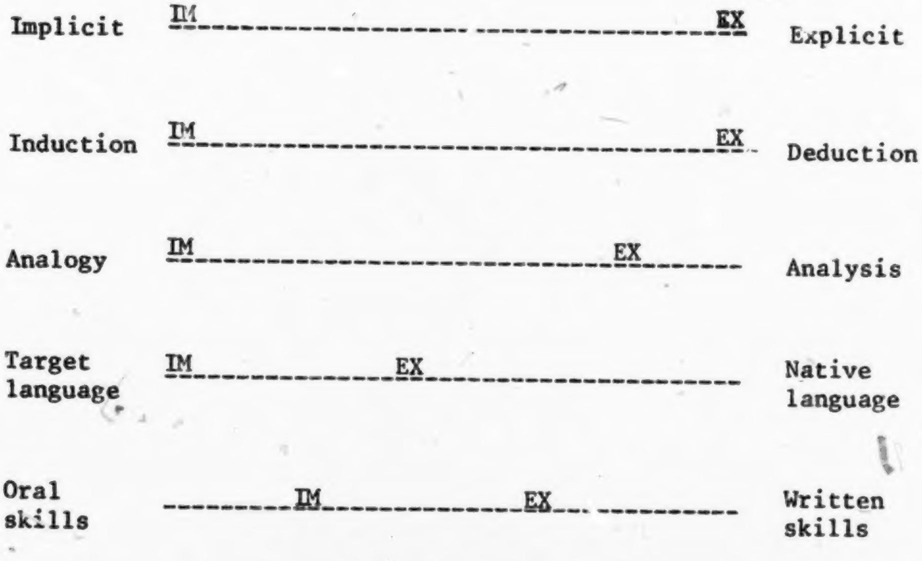
Implicit
IM
EX
Explicit
Induction
IM
EX
Deduction
Analogy
IM
EX
Analysis
Target language
IM
EX
Native language
Oral skills
IM
EX
Written skills

Figure 3.19 A comparison of the two experimental methods with regard to some aspects of language teaching

3.6 Evaluation Instruments

In the present experiment tests were administered in order to measure (1) background variables such as initial proficiency in English (Proficiency Test, PACT) and verbal aptitude (Aptitude Test), (2) achievement through experimental treatment (Achievement Test), (3) attitude and motivation (Attitude Test), and (4) achievement through the regular course (Term Test).

The tests will be presented in the above order. A full set of each test--with the exception of PACT and the Attitude Test--has been incorporated in Appendix 3. Except for PACT and the Attitude Test the evaluation instruments were constructed by the investigators. The characteristics of the various tests are summarized in Tables 3.23, 3.24, and 3.25.

3.6.1 The Proficiency Test

This was a written multiple choice test comprising 60 items to test command of basic vocabulary (items 1-30) and grammar (items 31-60). The first 15 items involved both recognition and recall and could, in Valette´s terminology (1967, p.35), be called partial production items, while the rest were recognition items.

This test was to serve as a measure on which class units could be compared and assigned to the two treatments. The test was also used as a covariate in analyses of covariance. Further on the basis of the test scores students with too high or too low proficiency to fit in the English 1 course could be recommended to transfer to courses more suitable to their proficiency. Making the class units more homogeneous, as far as proficiency was concerned, was desirable for the success of both the regular course and the experiment.

The Proficiency Test also gave a good opportunity for familiarizing the subjects with the technique of taking multiple choice tests, which they were to encounter on several occasions during the term. Many students, especially older ones, had never been confronted with such tests before and were at the beginning reluctant to check an alternative unless they felt they knew the correct answer.

The test was administered in each class unit at the first meeting. Testing time was 40 minutes, but in some cases students who could not finish the test in time were given a few extra minutes. It was considered more important to have students complete their tests than to keep rigorously to the stipulated time.

Since the subjects had no grades in English to which the test scores of the Proficiency Test could have been related in order to obtain a measure of its validity, we refer to the correlation tables presented in Chapter 4 in which coefficients of correlation between this test and other tests are given.

Reliability has been calculated by the Kuder-Richardson formula 20, yielding .85 for the vocabulary part, .68 for the grammar part, and .87 for the entire test.

3.6.2 PACT

This test was given largely for the same purposes as the Proficiency Test. As an auditory comprehension test, PACT was regarded as a valuable complement to an entirely written proficiency test partly because the subjects were to take further auditory tests in the course of the experiment, and partly because every piece of information on the audio-lingual skills of our subjects was of particular interest in view of the wide range of age they represented.

The test will be described in the words of its constructors (Lindblad and Levin, 1970, p.52): "The original test, called Pictorial Auditory Comprehension Test, was developed by John B. Carroll and one of his assistants, Wai-Ching Ho. It is a listening comprehension test intended to measure foreigners' comprehension of spoken English." The present test is an entirely new version, "although with the original testing technique preserved. Thus the pupils listened to a taped conversation or description on an object or event, etc., and then marked which of the four alternatives (in the form of pictures) corresponded to what was said on the tape. The test consists of 55 items and takes 30 minutes to administer. The reliability (K-R 21) of the test is .85." The test is "uncontaminated as far as reading ability is concerned" having no options on the answer sheet consisting of written alternatives.

The reliability obtained by the same formula (K-R 21) for our sample was .90. A sample page with some items from PACT has been included in Appendix 3.

3.6.3 The Verbal Aptitude Test

The verbal part of a commonly used intelligence test battery (F-provet) developed by Härnqvist (1956) was used to measure verbal aptitude. The test is of the group-test type and has been standardized for grades 6 - 9 of the compulsory school. Though chiefly adequate for these age groups, it can be used from grade 4 onwards and has been used at age-levels above 16.

The verbal part is intended to measure verbal comprehension. It comprises 70 vocabulary items, for each of which the synonym is to be selected from four alternatives. This subtest takes 14 minutes to administer.

3.6.4 The Achievement Test

According to Jakobovits "one important reason why research on the comparative effectiveness of different teaching methods has never yielded definitive results is that the methods and procedures employed for assessing what the student has acquired have been inadequate" (1970, p.149). As Lado points out, "highly controlled experiments will usually require the preparation of special tests for concentrated measurement of the particular variable being investigated . . ." (1961, p.382). Such a test in our experiment was represented by the Achievement Test battery.[1] Since it was administered both as a pre-test and a post-test in order to measure the subjects' progress resulting from the experimental treatments and to evaluate possible differences in the efficiency of the two methods, it was the most important evaluation instrument of the experiment. What we call here the Achievement Test comprised primarily three major sections, Parts A, B, and C, with a total of 130 items. The fourth section, originally called Part D, deviated from the other parts on several points and will, therefore, be dealt with separately under the heading of "Oral Test".

Because of the importance of the Achievement Test the test battery had been elaborated with special concern and care. Before presenting the individual parts we shall deal with the characteristics we thought this test had to have, and with the principles guiding us in its construction.

The first essential requirement the test had to meet was that of high validity. "If the teacher wants his . . . class . . . to attain equal proficiency in the four language skills, and if his test are all written ones, then the test scores will not be valid evaluations of his professed objectives" (Valette, 1967, p.30). Therefore it was considered to be of basic importance that the subjects' grammatical competence in the structures should be measured for all language skills. Because of the greater ease with which written tests can be produced, administered, and scored, and because of the usually fair correlation between various tests, the rather common practice of using predominantly, or even exclusively, written tests may be justified in ordinary courses. However, evaluating the results of a comparative study involving a method like IM with written tests only, could not be considered satisfactory. Firstly, it could be expected that the two treatments would yield different results on different tests. Secondly, only by using a many faceted measure could we hope for indications as to possible transfer effects from one skill to another. It ought to be remembered that in methodological debates like the one in Sweden, proponents of cognitive methods have often been accused of not keeping in mind the objectives of modern language teaching, i.e. the importance of developing listening and speaking ability. Representatives of the cognitive school, on the other hand, claim that these skills need not be developed exclusively through audio-lingual training, and that practice in reading and writing may very well be a short-cut toward achieving audio-lingual skills. This is the converse of the assumption forming one of the basic tenets of the audiolingual approach "that students so trained will not only be able to understand and speak the foreign language, but will eventually achieve skill in reading and writing at least comparable to and possibly superior to that of students trained by traditional methods" (Hayes, 1964, in Jakobovits, 1970, p.41).

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[1] The appropriateness of the term "Achievement Test" may be questioned, since, according to Valette, such a test "is not based on the content of a particular course of instruction" (1967, p.5). Therefore, "Progress Test", as defined by Valette, would have been a more appropriate term since it "measures the extent to which a student has mastered the material being taught in the classroom and the language laboratory" (Ibid.). However, having been administered as a pre-test, too, our test battery does not qualify for this term either, and it was decided to term it Achievement Test, the more so as in Lado's words this term makes "reference to the fact that students have to struggle through a course or a learning experience of some sort to 'achieve' a certain amount of the language"(1961, p.369).

For the above reasons, and also in order to avoid a bias in favor of either treatment, it was decided that the Achievement Test battery should comprise tests in all four skills. This is also in line with Valette's recommendation that "The language teacher . . . should . . . employ a combination of recall, recognition, and partial production tests to evaluate the various facets of language learning" especially because "the degree of correlation between listening tests (recognition) and reading tests (recognition) or between speaking tests (recall) and writing tests (recall) has yet to be established" (1967, p.36).

It must be noted that the specific and rather limited aim of the experimental treatments was to develop the grammatical competence of the students in certain structures, not overall language proficiency. Therefore the various parts of the Achievement Test had to be constructed with special regard to this objective. A great effort was made to construct the test items so that they should distinguish competence in these structures from general proficiency in the language. Only basic vocabulary and other grammatical structures were involved in the test items so that even students with the poorest proficiency could be expected to grasp the sense of each item. In a number of instances the Swedish equivalents of words were given in order to clarify meaning.

Since the aim of the experimental treatments was to make students internalize English problem patterns, i.e. grammatical structures that are not parallelled by the Swedish equivalents and therefore subject to interference from the native tongue, the Achievement Test was to reveal whether the student--as a result of a conscious or unconscious process--had overcome the native language habit and acquired grammatical competence in identifying and using grammatical sentences involving the critical pattern. Many of the distractors, therefore, were such as to reflect native language habits, which in several instances necessitated not only inappropriate but also incorrect forms. This, we know, will meet with certain dissatisfaction on the part of many teachers. Valette's opinion that "Only items that are grammatically correct should be employed" (1967, p.75) is probably shared by many.

The idea behind this principle is, of course, that "students profit most from continual confrontation with correct forms" (Ibid., p.75). The use of incorrect forms in teaching may be questionable, but in an instrument measuring the outcome of the experiment, we feel that the technique of offering grammatically unacceptable forms for comparison with correct forms is justified as long as they reflect interference from the native language, or from other aspects of the target language. This explains to some extent the use of incorrect forms as distractors. Another reason was that suitable alternatives were often difficult to find, while at the same time it was desirable to keep the number of alternatives constant. The objection to incorrect forms on the grounds that they can be discarded without even hearing or taking a look at the stem, holds of course true, but it should be added that the ability to reject incorrect forms usually goes hand in hand with the ability to use the proper one. It should be noted, however, that not more than 15 % of the distractors, i.e. the inappropriate alternatives, included in our multiple-choice tests (Parts A and B) were of such a kind that they could be rejected by the competent speaker even without hearing or seeing the context.

Another principle we had in mind when constructing the Achievement Test was that the test items should be equally distributed over the grammatical structures taught, as far as Parts A, B, and C were concerned. This was to facilitate the comparison between the grammatical structures with respect to the progress achieved by the subjects.

Other requirements were that the various subtests should be easy to administer and score, and--most important--that no test items should have occurred in the lesson material. Whatever mode of grammar teaching we adopt, the purpose of this teaching process cannot be merely to develop the student's ability to recall and reproduce items he has encountered in the foreign language course. No doubt, the real objective has to be to instil in the student the grammatical competence which will enable him to understand and produce sentences he has never been confronted with before.

Finally it ought to be stressed that one of the secondary objectives of the experiment was to develop and try out evaluation instruments, especially oral ones, for the testing of grammar.

The reliability of the entire test, including Parts A, B, and C, calculated on pre-test scores by the K-R 20 formula, was .90.

Part A

This was a 60-item, multiple-choice, hybrid test. In this test the stimulus part (stem) of each item consisted of two or more taped exchanges between a female and a male voice, with the response alternatives printed on an answer sheet. The last exchange of each short conversation was incomplete and it was for the student to determine the missing part by checking the appropriate alternative, which was given along with two distractors. The missing part of the conversation, printed on the answer sheet, contained the crucial element of one of the grammatical structures taught in the experimental lessons. Since Part A was to represent the aural counterpart of Part B, a written test (see below), it was essential that the written part of this test should be as short as possible, preferably one or two words per alternative, in order to limit to a minimum the effect of the differences in reading ability. As it was, the five grammatical structures to be taught allowed the construction of items in which the written alternatives could be made so short that differences in reading ability were most unlikely to have influenced the outcome of the test.

The assumption behind Part A is that when we listen to speech, e.g. a conversation, we constantly make our forward guesses as to what follows (cf. Stern, 1970, p.54), even if we are not actively involved in the conversation. Therefore "even listening to a language is an extremely active process" (Ibid., p.53). When a sentence has been cut short, as in the items of Part A, the listener supposedly continues the sentence according to his ability to make forward guesses, especially if the context leaves little doubt as to the end of the message. Checking his forward guess against the alternatives on his answer sheet, the student is likely to find one that coincides with his guess. If he has internalized the structure, he will mark the correct option, but if he is still under the influence of his native language habit, or has drawn incorrect conclusions during the learning process, he will be likely to check the alternative that reflects native language structure or incorrect conclusions.

In Part A we were less scrupulous about using grammatically incorrect distractors than in its written counterpart, i.e. Part B, the reason being that in the auditory test the student had no chance to dwell upon individual items longer than the limited time allowed by the tape, nor had he any chance of skimming through the answer sheet to exclude incorrect alternatives.

Part A, including instructions and three example items, was on tape and took 25 minutes to administer. The instructions encouraged the students to guess if they were not sure of the correct answer. When given as a post-test, the instructions were limited to a few sentences and the testing time was reduced to 19 minutes, which was slightly more than the net time of the test. The pauses for the students to select and mark their alternatives were timed by the tape and were kept at 6 seconds irrespective of the length of the stems or the options.

Items were arranged so that every fifth item tested the student on the same grammatical structure. One reason for this was to make it more difficult for the students to identify the structures incorporated in the test and thus prevent them from devoting themselves to studying the structures after the pre-test. Another reason was to make it more convenient for the scorer to count the right answers on each grammatical structure.

Variables such as acoustic conditions and the quality of tape-recorders and loudspeakers were controlled on testing occasions just as strictly as during experimental lessons.

The reliability of the test was .78, calculated on pre-test scores by the K-R 20 formula. The scoring of this part of the test battery was a mechanical procedure, and since the test papers were scored twice, once to get the entire scores and once to get the right answers distributed over structures, errors made on the first scoring were detected and eliminated on the second.

Part B

It may be argued, and with good reason, that a test like Part A will favor those who have received an audio-lingual training, as the IM group.

Part B was to counterbalance this possible bias, since it can be said to favor those who have received instruction predominantly through reading and writing, i.e. in our case the EX group.

Parts A and B were essentially of the same type and differed only in that the stems of the items were oral in the former and written in the latter.

According to Stern "Listening and understanding of speech are no longer looked upon as purely 'receptive' or 'passive' processes; the individual actively selects and imposes his own construction on what he hears. Basically, listening and speaking are equally productive processes" (1970, p.61). From this it should follow that reading and writing are equally productive processes. On these grounds Parts A and B of the Achievement Test ought not to be classified as measures of passive or receptive skills. However, it must be admitted that doing these tests "the student can select the correct alternative from the given choice through a process of recognition" (Valette, 1967, p.35). In other words, he might not be able to make the right forward guess if no alternatives were given, but when seeing the correct option, he recognizes it as being appropriate.

Part B was a 50-item, multiple choice, written test in which each item consisted of a sentence or two, containing one of the grammatical structures taught. The crucial element of the structure was given with two distractors, in four instances--for lack of adequate alternatives--only with one. The students marked their choices in the appropriate boxes on a separate answer sheet.

Instructions on how to take the test were printed on the tests and the answer sheets, but were given orally, too. The investigators also made sure that the students had understood the procedure. The net testing time on this part was 25 minutes.

As in Part A, the items were arranged so that every fifth item tested the same structure. The scoring of the test was done in the same manner as in the case of Part A.

The reliability of this test was .76, calculated on pre-test scores by the K-R 20 formula.

According to Valette "Speaking and writing tests measure the active power of recall; listening and reading measure the power of recognition" (1967, p.35). Parts A and B have, accordingly, provided us with measures for the power of recognition. In order to measure the "active power of recall" of the students in the structures taught we had to construct a speaking and a writing test as well. Even though we stress the activeness of the kind of tests that Parts A and B represent, it must be admitted that recall items of speaking and writing tests measure a still higher degree of productiveness or activeness.

Since the oral recall test was administered as a post-test only we shall first present Part C, i.e. the writing test.

Part C

This part of the Achievement Test battery comprised two 10-item parts representing slightly different types of tests. The first part was a dialogue which incorporated the structures taught. However, the crucial elements of the structures were left out to be filled in by the students. Since the context did not necessarily reveal the desired answer, the missing words were cued by Swedish equivalents. Although each of the five structures was represented by two items in this subtest, the items could not be arranged in the same order as in Parts A and B. This grouping had to be made by the scorer who also transferred the test scores onto another form.

In the second subtest complete Swedish sentences were given with corresponding English translations in which the crucial elements were missing. The students were expected to fill in the missing words with guidance from the Swedish sentences. The items were ordered according to the pattern followed in Parts A and B.

A look at Part C shows that it included gaps for words which had nothing to do with the structures to be tested. These feigned items, usually easy ones, were included partly in order to motivate the students, and partly in order to prevent them from discovering what structures were being tested.

There were hardly any fundamental differences in the testing procedures between Part C and the preceding two tests. The principle behind the three parts was equally to engage the students mentally in simple communication. Since the crucial linguistic element of the communication was missing, it was for the student to complete the message, and in doing so he revealed his skill in interpreting or using these structures.

It is fair to assume that Part C with its translation and fill-in items favored the EX group. A corresponding oral test--expected to favor the IM group in corresponding degree--was given only after the lessons. In order to reduce the bias in Part C, the test-papers were scored according to the principle that all answers that reflected correct oral use of the structure should be accepted as correct. Thus, even items with rather bad spelling mistakes were given credit as long as they could be interpreted as unsuccessful graphic representations of acceptable oral versions. Consequently the scoring of this part of the Achievement Test was not a merely mechanical activity: the investigators had to establish and follow norms for all answers that were not clearly correct or wrong.

The reliability of Part C, obtained by the K-R 20 formula on pre-test scores, was .76.

3.6.5 The Oral Test

The main reason why the test had not been administered as a pre-test was that the engagement of the subjects in a test requiring oral production with structures they had never heard of would, in all likelihood, have caused frustration and due irritation among them. Besides, the test was more complicated to administer than the other parts as it required the use of a language laboratory, and it was also more time-consuming to score.

The Oral Test comprised two main parts, a recognition and a production part, consisting of 40 and 30 items respectively. Each of the two parts was broken down into several subtests. The reason why we used a whole series of different testing techniques was the difficulty of including the five structures in the same kind of test. As a result, the test items were not distributed evenly over the five grammatical structures; neither were they arranged in the same order as in the other parts of the Achievement Test. The number and the sequence of items testing different structures can be seen in Table 3.25.

Some of the guiding principles for the construction of the Oral Test were as follows: the entire test should be practically free from the written word; response alternatives, including those in multiple choice items, should be given orally, the items should be of a communicative character whenever possible, i.e. the student should interpret or produce an oral message related to a situation represented in a picture. Finally, like the other parts of the Achievement Test, this part should test the students on grammar, not other elements.

The Recognition Part

Common to this part of the test was that each of the 40 items consisted of a statement which the student had to listen to and identify as appropriate or inappropriate.

In Subtest 1 the student had to identify 10 sentences as grammatical or ungrammatical, by saying "right" or "wrong" after each sentence.

In Subtest 2 16 statements were made about some pictures. The students were to decide whether or not the statement was appropriate for the picture in question by saying "right" or "wrong".

In Subtest 3 14 statements were made on several picture series. The student was to decide for which one of the pictures the statement was appropriate. In his response he gave the number of the picture of his choice.

The Recognition Part was based on the assumption that "In order to understand the target language, the student must be able to recognize the patterns of the language. . . . unless the student can recognize patterns he will not be able to employ them with assurance and accuracy" (Valette, 1967, pp.74-75). Picture items like the ones used in Subtests 2 and 3 are common in testing syntax and structures. However, they are not feasible for the testing of certain grammatical structures.

It was found that while structures 1 and 5 could easily be tested by the technique in question, the same technique was hardly applicable to the testing of the other structures. It was for this reason that we utilized subtest 1 which made it possible to include the other structures, too. As was mentioned above, this subtest included ungrammatical sentences. This again, was an offence against the principle of using grammatically correct forms only, and may therefore be questioned as an adequate testing technique in general. However, as was pointed out above, in our experiment it was considered to be justified because of the importance of including all structures in the tests as evenly as possible, and because of the necessity of giving distractors reflecting native language structure even if this resulted in grammatically unacceptable forms.

The Production Part

In the 30 items of this part the students were to utter complete sentences carefully cued by the teacher´s voice and some pictures. The use of the crucial word in each item was the student´s "production" revealing his ability to use the structure accurately.

Subtest 4 contained 8 items, each consisting of a question and an answer. The student was instructed to replace the noun in the genitive of the question by an adequate possessive pronoun in the answer. To secure high frequency of responses, part of the answer was given by the master´s voice. However, the crucial element, in this subtest the possessive pronoun, was replaced by a signal. The student was then to repeat and complete the answer. Thus, each item in this section could be described as an oral fill-in item.

Subtest 5 was similar to the preceding one, i.e. consisted of question/answer items and involved the same technique, but the 6 items included here tested other structures.

Subtest 6 comprised 12 translation items. The students heard a sentence in Swedish relating to a picture and then an incomplete translation of the same sentence into English. The crucial element of each sentence was left out and replaced by a signal. Again, the student was to repeat and complete each sentence in the pause after the item.

Subtest 7 was a free-production test. The student was to produce at least four sentences relating to a picture. In each sentence he was to use one of four expressions, printed in the booklet below the picture. These expressions were so selected as to elicit sentences involving some of the 5 structures.

The Oral Test took 30 minutes to administer, including 11 minutes of instructions and example items. Since the Oral Test was unusual for the subjects both with respect to the testing techniques employed and the testing situation, it was important to give them careful and rather lengthy instructions in order to achieve a high frequency of responses. The time devoted to instructions as well as the net testing time were divided equally between the two parts of the test.

The following reliability coefficients were obtained by the K-R 20 formula: for the comprehension part .64, for the production part .86, and for the entire test .88.

The Administration and Scoring of the Oral Test

The administration of the Oral Test was dependent on access to a language laboratory with facilities to record the students´ voices. Therefore, a one-hour laboratory session was arranged for each class unit. The subjects were told that they would be given an opportunity of acquainting themselves with modern language laboratory equipment, but it was not revealed to them that they would be involved in a test again. Before the test was administered to a class unit, the booths had been equipped with labeled tapes, and the tape-recorders had been prepared for recording the students´ responses. The students´ tapes were started and stopped by one of the investigators from the teacher´s control panel. Therefore, the students were asked not to touch their tape-recorders. After some short instructions the session began with a few minutes´ oral drill work during which the investigator checked that everything functioned well and that the students responded to the cues. After this introductory work the students were told that they would be given samples of different exercises devised on the basis of the "Special Course" for language laboratory use, and they were asked to participate actively and speak up when responding to cues. A test booklet with pictures underlying the test had been put in each booth in advance. The various subtests were introduced as exercises, and each time a new testing technique was to be employed, the students were given careful instructions and examples of how to participate. The instructions were given in the native language from the master tape. After the test the tapes were given identification numbers and were collected.

Our decision not to reveal the real aims of the session to our subjects was due to the same considerations which made us decide not to tell them about the experiment. It is believed that this arrangement was advantageous for the administration of the Oral Test, since the frequency and spontaneousness of the students´ responses were not affected by the nervousness often caused by testing situations.

The Recognition Part of the Oral Test suffered, unluckily, from a rather serious defect which was detected only after the test had been given to the first groups. The short responses to the items, such as "right" or "wrong" often came simultaneously from a large number of students and were audible to those who were slower in responding. It must be taken into consideration that a number of students probably changed their minds and gave their responses under the influence of the answers they heard either from the majority of the groups or from individual students sitting in booths next to their own.

If we had foreseen this detail, we could have eliminated this shortcoming by supplying the students with answer sheets for marking their choices instead of giving them orally. In a few cases, when it was obvious to the scorer that a subject consistently waited for the others to answer before delivering his own response, the entire test of the individual was disregarded. The high correlation between the scores of this and other tests indicates that not many students are likely to have taken advantage of the weakness of the test. The Production Part had no such shortcomings. The students had to utter complete sentences in a short period of time, and they had to concentrate on the correctness of their answers. Since the responses did not come in unison, the acoustic effect of some twenty responses was an incomprehensible murmur, giving no lead to anybody as to the proper answer to the stem.

The scoring of the Oral Test could be performed by anybody possessing a fair knowledge of English. The only detail of the response taken into account was grammatical correctness. The task of the scorer was to compare the students' responses with a given key and to put one of three symbols in the appropriate box of a scoring sheet for each correct, incorrect, or omitted answer. Since the pronunciation, intonation, or fluency of the students' answers were not evaluated, there was no need to establish interscorer reliability. The scoring of the Oral Test was done by a student teacher with competence to teach English in grades 4 - 6 of the comprehensive school, and with good oral proficiency in the language. In a few doubtful instances the investigators decided what score should be given. The scoring was also checked by the investigators through random checking of some tapes.

3.6.6 The Attitude Test

The last experimental lesson ended with a short taped request asking the subjects to give their evaluation of the "Special Course" by filling in a questionnaire. Copies of the Attitude Test were then handed out.

The purpose of this test was threefold: to measure the students' general attitudes toward the course, i.e. toward the experimental treatment they received, to have some details of the lessons evaluated by the students, and to get some evidence as to their general attitudes toward the subject and their motivation for studying it.

The questionnaire consisted of 23 items grouped into three main sections: questions on the course as a whole, questions on various details, and general questions. 20 items were followed by alternative answers, varying in number from 2 to 5 per item, and three were open questions. Seven items served as a basis for measuring general attitude toward the experimental lessons.

Two versions of the questionnaire had been constructed, but apart from the color of the covers they differed in four items only. In these items the IM students were asked to evaluate the pattern drills while the EX students the explanations. In other respects the wording of these items was identical.

3.6.7 The Term Test

The double purpose of administering this test was to have a basis for grading the students on their achievement in the regular course, and for comparing the two experimental groups on achievement outside experimental activity.

The test consisted of four sections, but only two of them could be corrected objectively: a vocabulary and a grammar part. In the present study we deal with test scores gained from these two sections only.

The vocabulary part consisted of 20 Swedish words for which the students had to supply the English equivalents. The grammar part had 16 items in which the students had to change sentences to questions, the negative, the past tense, and the plural, i.e. grammar not included in the experimental material. According to norms established by the investigators each item could be given 0, 1, or 2 points, which meant a maximum of 72 points for the entire test. In order to avoid inconsistency, the investigators cooperated in the scoring of all test papers.

The following reliability coefficients were obtained by the K-R 21 formula: for the vocabulary part .83, for the grammar part .88, and for the entire test .91.

Table 3.23 The Characteristics of the Proficiency Test, PACT, and the Term Test

TEST	SUB-TEST	DESCRIPTION OF TEST							NUMBER OF ITEMS (MAX. SCORE)	TESTING TIME (MINUTES)		RELIABILITY	
		ELEMENT TESTED	SKILL INVOLVED	STEM	RESPONSE	OPERATION		TYPE		TOTAL	NET	FORMULA	COEFF.
						ALTERNATIVES	OWN PROD.						
PRO-FI-CIEN-CY TEST	1.	VOCAB.	READING	WRITTEN		3 - 4	-	PARTIAL PROD., RECOGN.	30			K-R 20	.85
	2.	GRAMMAR	READING	WRITTEN		3	-	RECOGN.	30			K-R 20	.68
ENTIRE PROFICIENCY TEST									60	43	40	K-R 20	.87
PACT		GENERAL COMPRE-HENSION	LISTENING	ORAL	PICTORIAL	4	-	RECOGN.	55	30	25	K-R 21	.90
TERM TEST	1.	VOCAB.	WRITING	WRITTEN		-	TRANSL.	RECALL	20 (40)			K-R 21	.83
	2.	GRAMMAR	READING, WRITING	WRITTEN		-	ALTER-ATION	RECALL	16 (32)			K-R 21	.88
ENTIRE TERM TEST									36 (72)	62	60	K-R 21	.91

Table 3.24 The Characteristics of the Achievement Test, Parts A, B, and C

PART	DESCRIPTION OF TEST							NUMBER OF ITEMS	TESTING TIME (MINUTES)		RELIA-BILITY (K-R 20)
	ELEMENT TESTED	SKILL INVOLVED	STEM	RESPONSE	OPERATION		TYPE		TOTAL	NET	
					ALTERNATIVES	OWN ANSWER					
A	GRAMMATICAL STRUCTURES	LISTENING, READING	ORAL	WRITTEN	3	-	RECOGNITION	60	25	19	.78
B		READING	WRITTEN		2 - 3	-	RECOGNITION	50	28	25	.76
C		READING, WRITING	WRITTEN		-	FILL-IN, TRANSL.	PRODUCTION	20	11	10	.76
THE ENTIRE ACHIEVEMENT TEST								130	64	54	.90

Table 3.25 The Characteristics of the Oral Test

TEST		DESCRIPTION OF TEST				OPERATION		ITEMS	DISTRIBUTION OF ITEMS OVER STRUCTURES					TIME		RELIA-BILITY (K-R 20)
PART	SUB-TEST	ELEMENT TESTED	SKILL INVOLVED	STEM	RESPONSE	ALTERN.	OWN ANSWER		1	2	3	4	5	TOTAL	NET	
RECOGNITION	1.	GRAMMATICAL STRUCTURES	LISTEN-ING	ORAL	TRUE - FALSE	2	-	10	-	3	4	2	1			
	2.			ORAL AND PICT.	TRUE - FALSE	2	-	16	6	2	-	-	8			
	3.			ORAL	PICTORIAL	2 - 3	-	14	11	-	-	-	3			
	ENTIRE RECOGNITION PART							40	17	5	4	2	12	15'	9'30"	.74
PRODUCTION	4.	GRAMMATICAL STRUCTURES	LISTEN-ING, SPEAKING	ORAL AND PICT.	ORAL	-	ANSWER, COMPLETION	8	-	-	-	8	-			
	5.			ORAL AND PICT.	ORAL	-	ANSWER, COMPLETION	6	-	3	2	1	-			
	6.			ORAL AND PICT.	ORAL	-	TRANSL., COMPLETION	12	3	2	4	1	2			
	7.			PICT.	ORAL	-	FREE PROD.	4	-	1	1	-	2			
	ENTIRE PRODUCTION PART							30	3	6	7	10	4	15'	9'30"	.86
ENTIRE ORAL TEST								70	20	11	11	12	16	30'	19'	.88

CHAPTER 4

RESULTS

4.1 Data Treatment

The data of the study were processed by an IBM 360/65 computer. Only data from subjects who had attended eight or more experimental lessons, out of the total of ten, were used in the analyses of treatment effects. Out of a total sample of 138 subjects involved in the experiment thirteen subjects had attended less than eight lessons and were therefore left out of the computations. Thus 125 subjects remained for the final analyses.

Means, standard deviations and frequency distributions were computed for all variables. The data were obtained for the total experimental sample, for the two treatment groups separately, and for each class unit. Correlations between all variables were obtained for the entire experimental sample as well as for the treatment groups separately. The principal measure of progress used in the analyses of treatment effects was the difference in raw scores between pre-test and post-test results.

Since we could not use random assignment of subjects to the two treatments, it was important to keep background variables under statistical control. This was accomplished by means of a series of analyses of covariance in which scores on the pre-test, the proficiency test, PACT, and the verbal aptitude test were used as independent variables.[1] A weighted sum of the scores on these four tests was also used as a multiple covariate.

Our aim was also to investigate possible interaction between age, proficiency, and aptitude levels on the one hand, and teaching method on the other. The sample was divided into three age groups, three proficiency groups, and three aptitude groups for which achievement scores were then calculated separately in a series of analyses of variance with two-way classification.[2] Post-test and progress scores were used as dependent variables. A composite PACT plus proficiency test score was used as a criterion of proficiency.

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[1] The analysis of covariance is a statistical calculation which gives an estimate of the mean scores the treatment groups would have achieved if they had been equal from the beginning with respect to such variables as proficiency and aptitude. Unequal standings on the background variables (= unequal initial scores) are compensated for. The estimated score thus obtained is called the adjusted mean. See further Lindquist (1953), pp.317-339, and Ferguson (1966), pp.326-340.

[2] The analysis of variance tests the significance of differences between a number of means. In our investigation comparisons were made between the means obtained in six cells, resulting from the division of subjects into three groups, or levels, within each of the two treatments (methods). The analysis with two-way classification permits the simultaneous study of two independent variables (e.g. age and method) with respect to results on a dependent variable (e.g. progress). See further Ferguson (1966), pp.281-325.

4.2 Main Results

4.2.1 Unadjusted Post-Test and Progress Means

There was substantial overall progress as a result of the experimental lessons. Both programs functioned very well and resulted in considerable increase in achievement test scores.

Table 4.1 gives the unadjusted post-test means for the entire experimental sample:

Table 4.1 Unadjusted Post-Test Means

Treatment Group	N	$\bar{x}$	s
IM	57	69.93	20.03
EX	68	77.60	20.53
Total	125	74.10	20.58

The EX group is ahead of the IM group by 7.67 points. The t test showed that the difference is significant at the .05 level of confidence ($t = 2.11$).[1] As will be remembered, the EX group had somewhat lower initial scores on the pre-test, and therefore there is a greater difference between the treatments in the progress results (Table 4.2):

Table 4.2 Unadjusted Progress Means

Treatment Group	N	$\bar{x}$	s
IM	57	13.37	10.12
EX	68	24.43	13.67
Total	125	19.38	13.33

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[1] The t test is used to determine whether the difference in mean scores between two groups is statistically significant or whether the difference can be ascribed to chance variation. If the probability is less than 5 in 100 that the variation might have occurred by chance, then the difference is said to be statistically significant at the .05 level of confidence ($p < .05$); the critical t value is 1.96. For significance at the .01 level the t value must be at least 2.58.

The difference of 11.06 points in favor of the EX group is significant beyond the .01 level (t = 5.19). Since there were no big differences between the treatment groups on essential background variables, we can draw a preliminary conclusion to the effect that the EX method was superior to the IM method with respect to learning as measured by our Achievement Test.

Figure 4.1 represents in diagrammatic form the frequency distributions of individual progress scores in the two treatment groups, and also in the entire experimental sample:

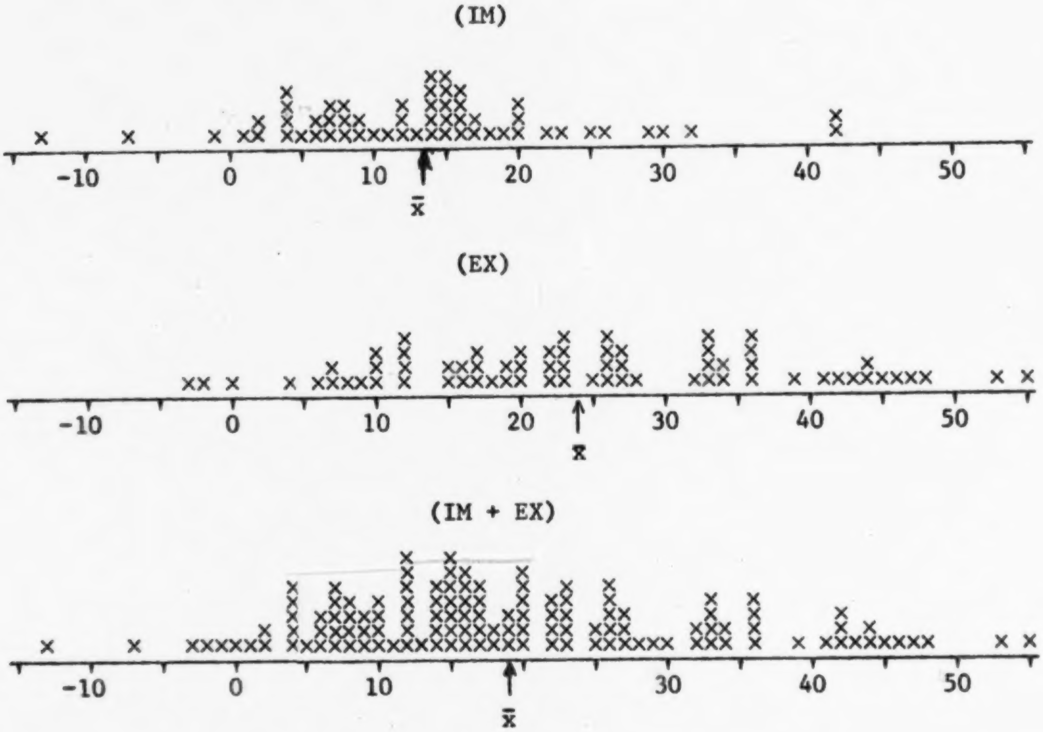

Figure 4.1 Frequency distribution diagrams of individual progress scores

The range of the progress scores is quite wide, as the figure illustrates. The lowest score is -13 and the highest is +55. The variation around the mean is greater in the EX group (s = 13.67) than in the IM group (s = 10.12) because of the higher average progress among EX subjects. (See further page 4:5).

There are five negative scores, three in the IM group and two in the EX group. Such "regress" scores are not unusual in educational experiments; they are often due to fatigue or low motivation at the time of the post-test. In our case they may also be purely random scores as the majority of items involved choosing between alternatives and thus permitted guessing. In tests of the multiple choice type there is bound to be a certain number of scores which deviate from the "true" scores, both in the positive and negative directions. When the test is used on a group, such scores tend to cancel each other out, and therefore a relatively small error is associated with the group mean, whereas each individual score may be affected by a larger error. To illustrate, we have calculated the standard error of measurement associated with the individual score on the pre-test. It was found to be 5.02. The standard error of the group mean was 1.42.

Table 4.3 is a comprehensive summary of the results in raw scores:

Table 4.3 Overall Achievement Scores: Unadjusted Means and Standard Deviations

Treatment group	Test	Pre-test		Post-test		Progress	
		$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
IM (N = 57)	A	26.95	8.61	33.00	9.31	6.05	5.41
	B	23.75	7.64	27.53	7.79	3.78	5.20
	C	5.86	3.40	9.40	4.16	3.54	3.83
	Total	56.56	18.32	69.93	20.03	13.37	10.12
EX (N = 68)	A	25.71	6.61	36.59	9.17	10.88	7.22
	B	21.82	5.19	29.18	8.14	7.36	5.84
	C	5.65	3.28	11.84	4.39	6.19	3.15
	Total	53.18	13.57	77.60	20.53	24.43	13.67
Total (N = 125)	A	26.27	7.58	34.95	9.37	8.68	6.87
	B	22.70	6.47	28.42	7.99	5.72	5.82
	C	5.74	3.33	10.73	4.44	4.98	3.30
	Total	54.72	15.94	74.10	20.58	19.38	13.33

The pattern of results is generally very regular, both with regard to results on the sub-tests, and with regard to achievement in the three classes within each treatment group. On all three parts of the achievement test the progress made by the IM group is only little more than half of that made by the EX group, as represented in Figure 4.2:

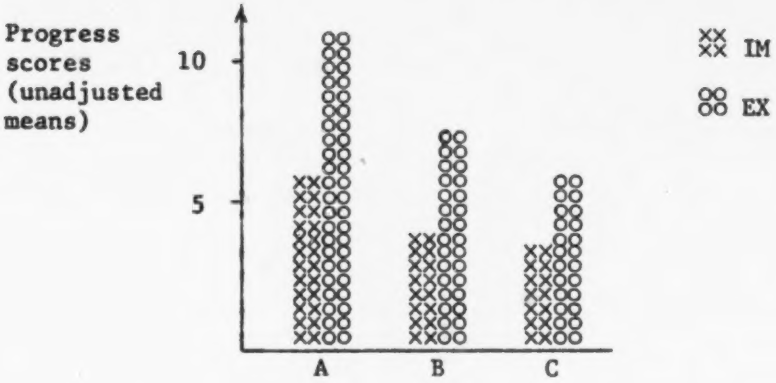

Figure 4.2 Progress on the three parts of the Achievement Test

The results attained by individual classes are set out in Table 4.4:

Table 4.4 Achievement Scores for Classes: Unadjusted Means and Standard Deviations

Treatment group	Class	N	Pre-test		Post-test		Progress	
			$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
IM	01	14	62.21	18.40	74.21	16.00	12.00	11.56
	02	24	54.04	18.55	69.42	21.30	15.38	10.66
	03	19	55.58	18.04	67.42	21.50	11.84	8.22
	Total	57	56.56	18.32	69.93	20.03	13.37	10.12
EX	11	30	54.43	15.24	79.43	24.97	25.00	16.30
	12	22	51.55	12.69	74.95	15.93	23.41	11.69
	13	16	53.06	11.85	77.81	17.44	24.75	11.28
	Total	68	53.18	13.57	77.60	20.53	24.43	13.67

The results exhibit a consistent pattern, the means of the EX progress scores being significantly larger and more uniform than the corresponding IM scores. The difference in variance between the IM and EX groups noted in the pre-test results has disappeared in the post-test, which means that the EX treatment has differentiated the subjects somewhat more than the IM treatment. The post-test standard deviations are approximately the same for the two groups (20.03 and 20.53 for IM and EX respectively). Note, however, that the EX group has learnt more and has reached a higher average level ($\bar{x}$ = 77.60), which normally would imply a greater in-group variability. One usually finds in group experiments that as learning increases, the differences between individuals (i.e. the variation within the group) also becomes greater, or, in other words, the greater the $\bar{x}$ the greater the s.

Likewise, the greater standard deviations in the progress scores for the EX classes must be seen in relation to the higher means. The EX students learnt significantly more and it is only to be expected that the variation around the mean should also be greater than in the IM classes.

It should further be pointed out that it is mainly two classes, 01 in IM and 11 in EX, that have brought about the difference in homogeneity between the treatment groups. Class 01 actually decreased its variation around the mean from the pre-test to the post-test, while class 11 showed an inordinate increase. As these classes are also somewhat deviant from the rest with respect to age--01 being the youngest and 11 the oldest--and other variables (see Section 3.3.3), the observed phenomenon can probably in some measure be explained as a result of unequal experimental samples. The problem illustrates the hazards involved when the group--and not the individual--is used as the sampling unit. If, instead, we had been able to assign individuals randomly to the two treatments, the chances are that the groups would have become more on a par with respect to standings on background variables.[1]

Returning to the means we shall give a graphic representation of the main results (Figure 4.3). Solid lines refer to EX classes and dotted lines to IM classes:

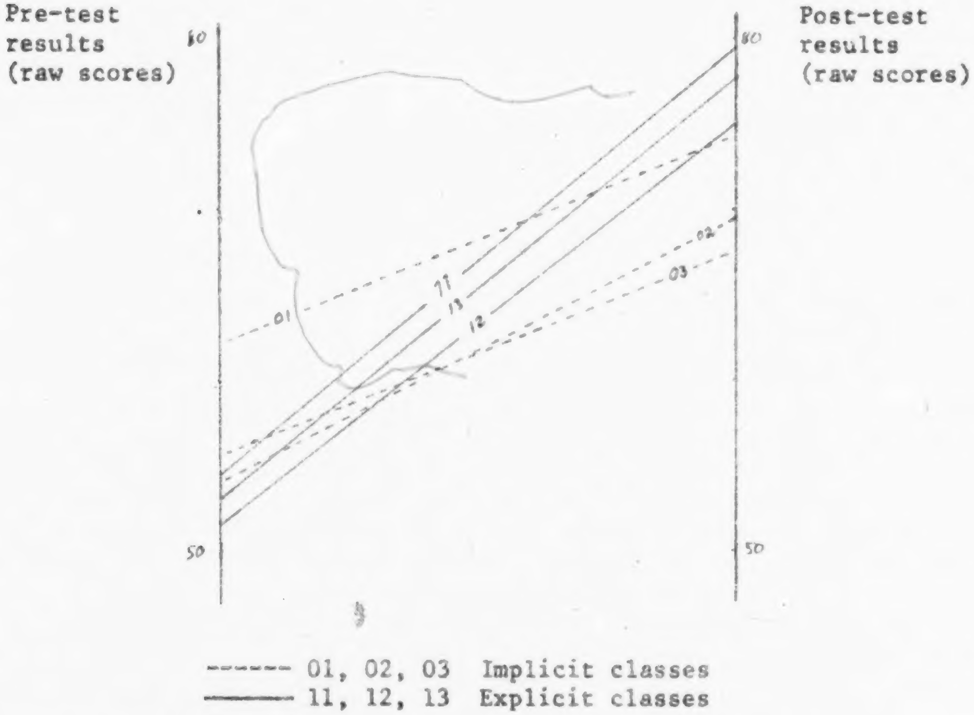

Figure 4.3 A graphic representation of treatment effects

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[1] It should be noted, however, that the unit of analysis is the individual score.

The progress lines for the EX classes are strikingly parallel. The IM classes also make fairly equal progress although two lines intersect. This uniformity of achievement between parallel classes can be taken as an indication that the main effect, i.e. the difference in learning between the IM and EX samples, cannot be ascribed to chance influence on the experiment. The programs do not seem to be sensitive to fortuitous, extraneous variation.[1]

4.2.2 Progress Over Each Structure

Items testing the same grammatical structure were arranged in a fixed, regular order in each test, which made it easy to compute progress on each structure, in addition to total progress. One of the purposes of this arrangement was to see if the methods worked differently for different structures. As will be remembered, the structures were dealt with individually and consecutively in the order in the table below; once a structure had been taught, it did not recur in subsequent lessons.

Table 4.5 presents the results of this computation:

Table 4.5 Distribution of Progress Scores Over Structure, Class, and Method

Class	N	1 some, any	2 adj. adv.	3 prep. +ing	4 poss. pron.	5 pass. voice	Total
01	14	.57	3.07	1.93	3.57	2.86	12.00
IM 02	24	2.50	2.17	2.33	2.96	5.42	15.38
03	19	2.63	2.32	1.06	2.42	3.42	11.84
IM Total	57	2.07	2.44	1.81	2.93	4.12	13.37
11	30	3.67	3.64	4.13	6.73	6.83	25.00
EX 12	22	2.63	3.37	4.32	5.82	7.28	23.41
13	16	.93	4.43	3.88	7.93	7.56	24.75
EX Total	68	2.69	3.74	4.13	6.72	7.15	24.43
IM+EX	125	2.40	3.15	3.07	5.00	5.76	19.38
	t[2]	.98	2.09*	2.58**	5.38**	3.90**	5.19**

---

[1] The impression was substantiated by two recent replication studies with the same materials shortly to be reported. Progress lines conformed quite closely to the ones in Figure 4.3.

[2] *denotes significance at the .05 level, and **significance at the .01 level.

There was better retention of the later structures, which presumably reflects normal forgetting rate. When the Achievement Test was administered, less than a week had passed since the last lesson on structure 5, but about four weeks since that on structure 1. On the other hand, there were probably also some negative transfer effects at work on the retention of later structures as a result of the learning of the earlier ones. Occasional misapplications of -ly and -ing endings in written exercises on the passive voice are indications of this.

There may also be other reasons for the regular increase in learning results. The students may gradually have become accustomed to the methods, so that the lessons gave increasingly better returns as the programs proceeded. This would then be true of the EX subjects in particular, as their mean scores are of ascending magnitude throughout, with only minor exceptions. It can be noted that according to Item 7 of the Attitude Test 34 subjects out of 68 in the EX group stated that they became more and more positive toward the experimental lessons, while nobody became more and more negative. Finally it is possible, but not very likely, that the later problems lend themselves more readily to, in particular, EX method teaching than the earlier ones for some reason or other. However, we can see no affinity between, for instance, structures 4 and 5, at least not with regard to the difficulties they present to a Swedish student. In our view structure 4 is fairly easy to learn, while structure 5 is quite complicated.

As for the IM group it can be noticed that preposition + gerund, taught in Lesson 6 and half of Lesson 7, was the problem least effectively learnt. Performance during experimental lessons gave no indication that this was going to be the case; students responded promptly and confidently to the various tasks and exercises. One reason for the relatively poor score is probably to be found in the deceptive simplicity of the structure. In Swedish a preposition can govern an infinitive construction of the verb, while in English the gerund form of the verb must be used. The EX students were made aware of this difference between the languages and could control the English structure intellectually while internalizing it through practice. The IM students, on the other hand, may have performed in the drills on a purely analogical basis without ever perceiving the underlying grammatical pattern, as the structure in itself is easy to imitate and model analogies on. When faced with the problem in a new context (i.e. the tests), they may have reverted to their more firmly established mother-tongue habits, thereby imposing the Swedish structure on the foreign language.

This explanation presumably goes for the rest of the problems as well, although probably to a less significant degree. The other structures are more obviously dissimilar to the corresponding Swedish constructions, and therefore the subjects may have become more easily aware that there were difficulties involved.

It can also be concluded that there are no very great fluctuations in the results from problem to problem. In varying degrees, the EX method is superior to the IM method on all five structures. One observation worth noting is that the structures showing the smallest differential learning effects (1 and 2), were also the ones most difficult to explain in concise terms. This might invite the rather "counter-intuitive" hypothesis that the cognitive approach is relatively less effective and less superior to the audiolingual approach, when the problem is more complicated. The conjecture may be correct, but only up to a point. Most probably the explanations function on a kind of "all-or-nothing" principle, i.e. they must, in order to be at all effective, be understood. If they do not lead to insight, they are probably a waste of time and could profitably be replaced by functional practice. In the limited time at our disposal in the experiment there was perhaps not time enough for proper clarification of the more complex problems, whereas the length of explanations may have been more adequate for the easier structures. A reasonable assumption is therefore that the efficacy of the cognitive approach is not determined by the complexity of the problem as such, but by the extent to which the complexity can be resolved in the explanation. If the time that can be devoted to clarification is too short, or if the explanation for some other reason fails to fulfil its purpose, it might prove more fruitful to concentrate on functional practice.

4.2.3 Adjusted Post-Test and Progress Means

For practical reasons it was not possible to split up the already existing class units for the sake of the experiment, and therefore we had to use the intact class as the sampling unit. As the number of classes was small, there might have been, from the outset, an uneven balance between the two treatment groups with regard to standings on relevant background variables, such as verbal aptitude and proficiency. To allow for such differences a number of analyses of covariance were performed, which took into account results on pre-experimental measures and made exact statistical adjustments of post-test and progress scores. Thereby we could arrive at as true numerical values of treatment effects as possible. The combination of variables that correlated highest with the dependent variables were chosen as covariates, according to the stepwise regression procedure described by Draper and Smith (1966, Chapter 6).

It may be mentioned that the progress score is often a less reliable measure of treatment effects than the post-experimental achievement test alone. The reason is that the progress score requires two measurements and consequently may be affected by two measurement errors, while the post-test score can only be affected by one such error as only one measurement is needed. However, in cases where there is a substantial difference between the treatment effects, and where, furthermore, the criterion tests are very reliable and highly intercorrelated, it matters very little which one of the two scores is chosen as a criterion of treatment effects. The following analyses furnish evidence of this (Tables 4.6 and 4.7). After the post-test and progress means have been adjusted for differences on four background variables, the F ratios for the differences between IM and EX treatment effects are found to be identical (= 33.73). This is also the case when the post-test and progress scores have been adjusted for differences in the pre-test results (F = 25.40).

The first analyses of covariance present the adjusted post-test means with four different independent variables as covariates (the Pre-test, the Proficiency Test, PACT, and the Verbal Aptitude Test). Also a weighted sum of the four variables has been used as a multiple covariate (Table 4.6):

Table 4.6 Analyses of Covariance. Dependent Variable: Post-Test Covariates: Pre-Test, Proficiency Test, PACT, Verbal Aptitude Test, and the Weighted Sum of the Four

Covariates	Adjusted Means		F ratio	p	ss'_y		df	b_w
	IM	EX			Between	Within		
(1) Pre-test	68.05	79.18	25.40	$<.01$	3797	149	1/122	1.02
(2) Proficiency Test	69.53	77.93	11.91	$<.01$	2187	184	1/122	1.60
(3) PACT	67.59	79.69	20.17	$<.01$	4403	218	1/121	1.31
(4) Verbal Aptitude Test	69.97	78.56	5.46	$<.05$	2009	368	1/108	.78
(5) The Weighted Sum of (1)-(4)	67.57	80.54	33.73	$<.01$	4384	130	1/104	

ss'_y = adjusted sum of squares in the dependent variable

b_w = the within-groups regression coefficient

df = degrees of freedom[1]

p = probability estimate (cf. Note on page 4:2)

The difference in post-test scores between the IM and EX groups increases as adjustments are made for differences in relevant background variables. This, of course, was to be expected as the IM classes had scored slightly higher on the pre-experimental tests involved (see Table 3.17). The adjusted means obtained with covariate No. 5--which is a composite measure of pre-test, Proficiency Test, PACT, and Verbal Aptitude Test scores--are our best estimates of the results that would have been attained if the two experimental samples had started out equally in respect of aptitude and proficiency. This analysis also yielded the highest F ratio.[2]

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[1] For a concise explanation of the concept degree of freedom the reader is referred to Ferguson (1966), p.156-157.

[2] The F ratio indicates whether the differences in mean scores from two or more groups are statistically significant or not. The critical F ratios are in our analyses of covariance approximately 3.9 and 6.8 at the .05 and .01 levels respectively.

The results of the corresponding adjustments of progress raw scores are set out in Table 4.7:

Table 4.7 Analyses of Covariance. Dependent Variable: Progress Covariates: Pre-Test, Proficiency Test, PACT, Verbal Aptitude Test, and the Weighted Sum of the Four

Covariates	Adjusted Means		F ratio	p	ss'_y		df	b_w
	IM	EX			Between	Within		
(1) Pre-test	13.33	24.46	25.40	<.01	3797	149	1/122	.02
(2) Proficiency Test	13.30	24.48	27.19	<.01	3877	143	1/122	.28
(3) PACT	13.09	24.74	27.63	<.01	4083	148	1/121	.16
(4) Verbal Aptitude Test	11.78	25.00	33.16	<.01	4762	144	1/108	.20
(5) The Weighted Sum of (1)-(4)	11.97	24.94	33.73	<.01	4385	130	1/104	

Again we find that the difference between the groups is accentuated when ability and proficiency variables are taken into account. The F ratios are all significant beyond the .01 level of confidence.

4.2.4 Oral Test Results

The Oral Test, which for practical reasons could only be administered as a post-test, yielded results in the same direction as tests A - C. However, the differential effect was less pronounced (Table 4.8):

Table 4.8 Oral Test Results: Unadjusted Means and Standard Deviations

Treatment group	Part 1			Part 2			Total		
	N	$\bar{x}$	s	N	$\bar{x}$	s	N	$\bar{x}$	s
IM	39	22.33	5.83	39	10.33	5.75	39	32.67	10.97
EX	56	23.46	4.47	56	12.68	5.75	56	36.14	9.06
t		1.03			1.96*			1.62	

The total raw score difference of 3.47 points is insignificant (t = 1.62), whereas the difference in Part 2 is just barely significant at the .05 level.

Counter to expectation the EX students did better than the IM students not only in the recognition part (Part 1), but also in the more active and productive part (Part 2), that is, they produced more sentences that were grammatically correct. Other qualitative aspects of the subjects' spoken language, such as pronunciation and fluency, were not considered; although important, they are outside the scope of this investigation. The tape recordings did not give the impression that there was any material difference between IM and EX students in such respects.

An anlysis of covariance with achievement in the Oral Test as the dependent variable was performed. As the covariate a weighted sum of PACT, Proficiency Test, and Pre-test scores was used (Table 4.9):

Table 4.9 Analysis of Covariance. Dependent Variable: Oral Test Covariate: PACT + Proficiency Test + Pre-Test

Adjusted Means		F ratio	p	ss'_y		df
IM	EX			Between	Within	
32.65	36.74	11.267	<.01	356	2718	1/86

The difference in favor of the EX treatment group is significant at the .01 level. The critical value of F is 6.96.

The results on this test merit special attention in view of the fact that the IM classes had been given considerably more oral practice than the EX classes.

4.2.5 Term Test Results

The Term Test, given at the end of the term, was intended to serve as a check on learning outside the experiment, i.e. of learning in the regular course, where the groups were receiving identical teaching as far as possible. The results are reported in Table 4.10:

Table 4.10 Results in the Term Test of the Regular Course: Unadjusted Means and Standard Deviations

Treatment	Part 1			Part 2			Total		
group	N	$\bar{x}$	s	N	$\bar{x}$	s	N	$\bar{x}$	s
IM	53	33.06	5.27	53	21.79	7.07	53	54.85	11.31
EX	66	31.21	6.00	66	22.70	6.39	66	53.90	11.46
t		1.80			.73			.45	

The IM classes are slightly better on this extra-experimental measure. This reflects the relationship between the experimental groups prior to the lesson series; the IM group scored somewhat higher on the achievement tests preceding the experiment.

These results furnish some evidence that the outcome of the study is not due to uncontrolled variables in the regular course teaching. Had the quality or character of that teaching been significantly different between IM and EX classes, this would, in all likelihood, have shown up in the test results. It seems safe to say that the regular lessons had not affected the treatment groups differently.

4.2.6 Interaction Effects

One of the aims of the experiment was to see if there existed any systematic covariation between the teaching methods and certain other variables, such as the learners' age, language proficiency, or verbal aptitude. Even if one method is on the whole markedly superior to another, it is of course still possible that the degree of superiority varies quite substantially from, for instance, one age level to another. It may even be possible that the one method is superior at one level and the other at another. This kind of covariation between two variables is called interaction.

In order to investigate interaction effects the experimental groups were each divided into three age levels, three proficiency levels, and three aptitude levels. The age levels were arbitrary, "natural" choices based on an inspection of the frequency distribution diagram, while the proficiency and aptitude levels were determined by the division of subjects into equally large groups.

The total experimental sample of 125 subjects was thus partitioned into six groups, or cells, for each of the three independent variables, so that tables with two columns, one for each method, and three rows, or levels, could be set up. Post-test and progress results were calculated for each cell separately, and the rows and columns were totaled. Application of the method of analysis of variance (two-way classification) to the data yielded three F ratios. The F ratio for rows (F_r) indicates the significance of the differences between row means, i.e. between the levels, the F ratio for columns (F_c) indicates the significance of the difference between column means, i.e. between the methods, and the F ratio for interaction (F_i) indicates the significance of the interaction effect.

In Table 4.11 are given the results of the first analysis of variance with achievement in the post-test as the dependent variable and age as the independent variable. The number of subjects in each cell is given within parenthesis.

Table 4.11 Analysis of Variance. Dependent Variable: Post-Test
Independent Variable: Age

Age Level	Treatment		Total
	IM	EX	
Upper: 41 -	58.57 (7)	66.38 (13)	63.70 (20)
Middle: 26 - 40	69.73 (30)	79.54 (46)	75.67 (76)
Lower: - 25	74.20 (20)	83.89 (9)	77.21 (29)
Total	69.95 (57)	77.60 (68)	74.11 (125)

Source of Variation	Sum of Sqs.	df	Variance Estimate	F	p
Rows (Age levels)	2652	2	1326 (s_r^2)	$F_r = 3.34$	$<.05$
Columns (Methods)	2593	1	2593 (s_c^2)	$F_c = 6.53$	$<.05$
Interaction	15	2	7 (s_i^2)	$F_i = .02$	--
Within Cells	47257	119	397 (s_w^2)		
Total	52517	124			

The variance estimates for the different sources of variation are indicative of the relative sizes of the deviations from the grand mean. As can be seen the greatest part of the total variance relates to the deviation of column means, i.e. method means, from the grand mean (74.11). Next the variable of age contributes the most to the total variation about the grand mean. The variance estimate for interaction ($s_i^2 = 7$) is, in relation to the variation within cells, altogether too small to be of any significance.

Thus there is no covariation between age level and teaching method if the post-test results are taken as the criterion. The test of the interaction effect yielded the interaction term $F_i = .02$.

If we plot the data on a graph we get a clear illustration of the lack of interaction effects (Figure 4.4):

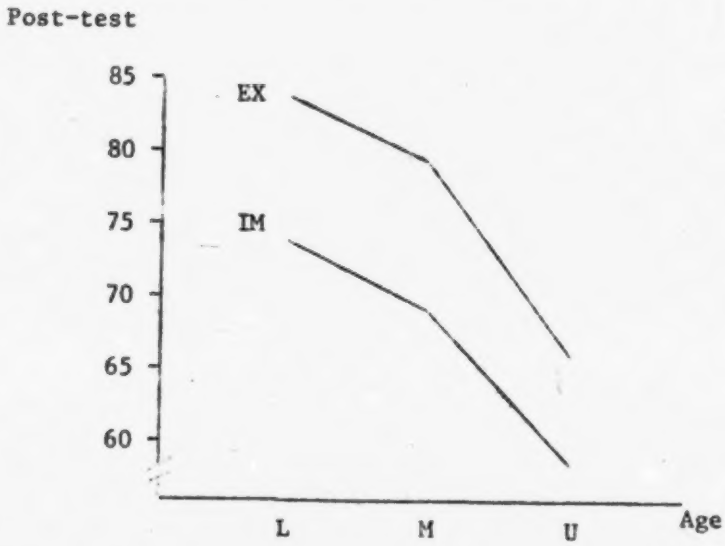

Figure 4.4 Post-test results at three age levels

There is, further, as the totals of Table 4.11 show, a tendency for the lower and middle age groups to do better than the upper age group. The F ratio for differences between rows (F_r) is 3.34, which is significant at the .05 level. The younger students score significantly higher in the post-test. It is important to keep in mind, however, that the analysis of variance operates with unadjusted means. Here, for instance, variables other than age have not been taken into consideration, although they certainly influence the results. For one thing, there is a negative correlation between age and pre-test results (cf. Table 4.29), which means that the younger students started out with higher pre-test scores.

The following analysis is somewhat more telling with regard to the question of how old and young students compare as learners. Again age has been used as the independent variable, now with progress as the dependent variable. The data and computations are summarized in Table 4.12:

Table 4.12 Analysis of Variance. Dependent Variable: Progress
Independent Variable: Age

Age Level	Treatment		Total
	IM	EX	
Upper: 41 -	10.00 (7)	20.38 (13)	16.75 (20)
Middle: 26 - 40	12.57 (30)	24.98 (46)	20.08 (76)
Lower: - 25	15.75 (20)	27.44 (9)	19.38 (29)
Total	13.37 (57)	24.43 (68)	19.39 (125)

Source of Variation	Sum of Sqs.	df	Variance Estimate	$\underline{F}$	p
Rows (Age levels)	175	2	88	F_r = .59	--
Columns (Methods)	4121	1	4121	F_c = 27.66	$<.01$
Interactions	15	2	8	F_i = .05	--
Within Cells	17731	119	149		
Total	22042	124			

The differences between age levels become very much smaller when we calculate with increase in learning during the experiment instead of only with standings on the post-test variable. The figures show that the middle group subjects, ranging in age from 26 to 40, make almost as great progress as the subjects who are 25 and younger. On an average subjects younger than 41 make only little more progress than subjects who are 41 and older; the EM subjects over 40 make better progress than the DM subjects under 26 (gain scores 20.38 vs. 15.75).

Dividing the variance estimate for age levels ($s_r^2 = 88$) by the within-cells variance estimate ($s_w^2 = 149$) we obtain an $\underline{F}$ ratio for rows of .59, which is not significant. For the differences to reach significance at the .05 level with 2 and 119 degrees of freedom (df) the $\underline{F}$ ratio must be at least 3.07. In statistical terms the differences between age levels are almost negligible.

However, it would be rash to conclude, on the basis of these results, that age is an **unimportant** variable in language learning. There is, in our sample, a positive correlation between age and results on the Verbal Aptitude Test ($\underline{r} = .26$), which might indicate that a real difference between the older and younger subjects in ability to learn is, to some extent, obscured by aptitude differences.

The $\underline{F}$ ratio for differences between columns (F_c) is 27.66, which, of course, is highly significant.

The interaction term obtained is insignificant ($F_i = .05$). We can conclude that there is no fluctuation in the relative effectiveness of our methods when we move from one age level to another.

The next two analyses were aimed at investigating whether the relative effectiveness of the two methods varied in interaction with the subjects' initial proficiency in the language. For this purpose the subjects of each treatment were divided into three groups of approximately the same sizes. The sum of PACT and the Proficiency Test scores was used as a criterion of proficiency.

In the first analysis the post-test score was used as the criterion of treatment effect (Table 4.13):

Table 4.13 Analysis of Variance. Dependent Variable: Post-Test
Independent Variable: Proficiency (PACT + Proficiency Test)

Proficiency Level	Treatment		Total
	IM	EX	
Upper: 70 -	87.77 (22)	95.00 (21)	91.30 (43)
Middle: 53 - 69	64.90 (20)	79.29 (21)	72.27 (41)
Lower: - 52	50.47 (15)	61.84 (25)	57.58 (40)
Total	69.93 (57)	77.70[1] (67)	74.13 (124)

Source of Variation	Sum of Sqs.	df	Variance Estimate	F	P
Rows (Proficiency levels)	23785	2	11892	F_r = 56.52	<.01
Columns (Methods)	3622	1	3622	F_c = 17.22	<.01
Interaction	271	2	136	F_i = .65	--
Within Cells	24827	118	210		
Total	52505	123			

The computations show that no interaction exists between treatment and level of proficiency as measured before the experiment. The following graph illustrates the treatment effects at the three levels (Figure 4.5):

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[1] One PACT score is missing and therefore N = 67.

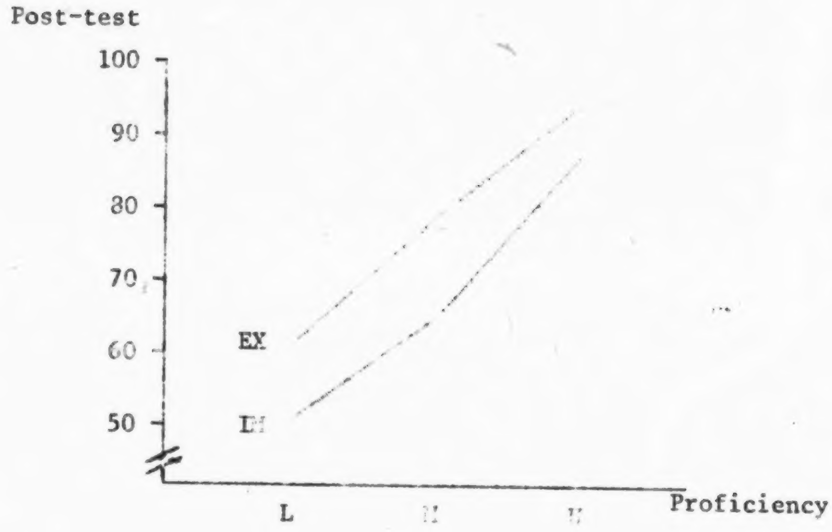

Figure 4.5 Post-test results at three proficiency levels

The lines are rough approximations of the so called regression lines, which are more exact representations of the relationship that exists between two variables, for instance, as in this case, between a personological and a criterion variable. Given the proficiency level of any given individual, one could, with a certain random error, estimate the post-test results under the two treatments.

The difference in achievement between the three proficiency levels (Totals) is very highly significant (F_r = 56.52). The high proficiency students finished significantly higher than the middle and low proficiency students, which of course was also to be expected. As we shall see later (Section 4.3) there is high correlation between Proficiency Test scores and scores on the Pre- and Post-tests, but there is only slight correlation between proficiency and progress. One can infer that those students who had high scores in the post-test also had high scores in the pre-test, and that students with low scores in the post-test also had low scores in the pre-test.

The analysis of variance with progress as the dependent variable and proficiency as the independent variable yielded the results set out in Table 4.14:

Table 4.14 Analysis of Variance. Dependent Variable: Progress
Independent Variable: Proficiency (PACT + Proficiency Test)

Proficiency Level	Treatment DM	Treatment EX	Total
Upper: 70 -	13.27 (22)	27.71 (21)	20.32 (43)
Middle: 53 - 69	14.00 (20)	25.38 (21)	19.83 (41)
Lower: - 52	12.67 (15)	21.08 (25)	17.93 (40)
Total	13.37 (57)	24.51 (67)	19.39 (124)

Source of Variation	Sum of Sqs.	df	Variance Estimate	F	p
Rows (Proficiency levels)	131	2	66	F_r = .44	--
Columns (Methods)	4049	1	4049	F_c = 27.02	<.01
Interaction	182	2	91	F_i = .61	--
Within Cells	17681	118	150		
Total	22043	123			

Again we find that there is no interaction between method and initial proficiency in English (F_i = .61). Nor are the differences in achievement between the proficiency levels statistically significant, although there is a tendency for low proficiency students to make less progress than the middle and upper level students.

Finally we shall present the results of the analyses of variance in which aptitude was used as the independent variable. The sample was divided into three equally large groups on the basis of results in the Verbal Aptitude Test. Table 4.15 presents the data and computations for the analysis of post-test results at the three levels of aptitude.

Table 4.15 Analysis of Variance. Dependent Variable: Post-Test
Independent Variable: Verbal Aptitude

Aptitude Level	Treatment		Total
	IM	EM	
Upper: 58 -	78.12 (17)	85.82 (17)	81.97 (34)
Middle: 48 - 57	72.35 (13)	81.52 (25)	78.55 (38)
Lower: - 47	59.94 (18)	69.38 (21)	65.02 (39)
Total	69.88 (43)	78.63 (63)	74.84 (111)

Source of Variation	Sum of Sqs.	df	Variance Estimate	F	p
Rows (Aptitude levels)	6009	2	3005	$F_r = 7.99$	$< .01$
Columns (Methods)	1998	1	1998	$F_c = 5.31$	$< .05$
Interaction	14	2	7	$F_i = .02$	--
Within Cells	39482	105	376		
Total	47503	110			

There is no fluctuation in the relative effectiveness of the two methods at the different levels of aptitude. In other words, it makes very little difference at what level we compare IM and EX.

The analysis also reveals that there is a comparatively small difference in post-test results between the upper and middle levels (3.42 points), and a greater difference between the middle and lower levels (13.53 points). The results are illustrated in Figure 4.6:

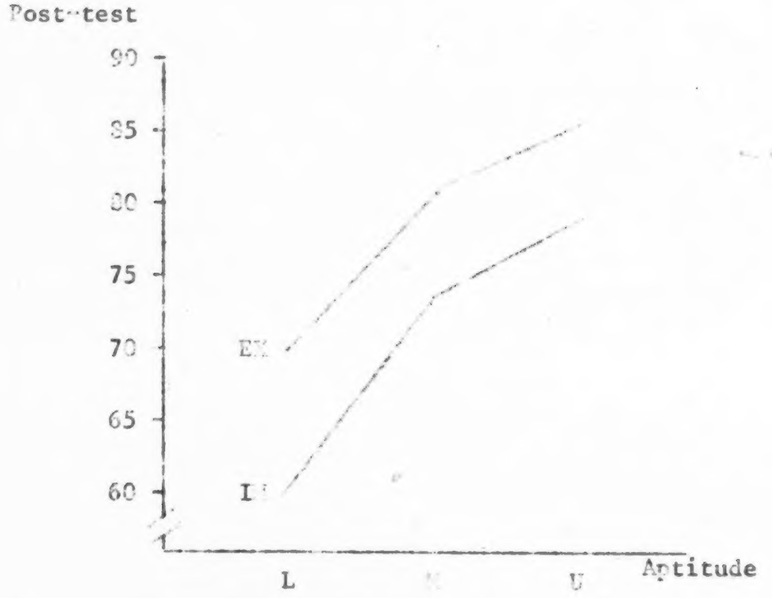

Figure 4.6 Post-test results at three aptitude levels

The corresponding analysis of progress results at three aptitude levels yielded the following results (Table 4.16):

Table 4.16 Analysis of Variance. Dependent Variable: Progress
Independent Variable: Verbal Aptitude

Aptitude Level	Treatment		Total
	IM	EM	
Upper: 58 -	10.29 (17)	27.24 (21)	19.66 (38)
Middle: 48 - 57	16.77 (13)	25.76 (25)	22.68 (38)
Lower: - 47	9.50 (18)	22.33 (21)	16.41 (39)
Total	11.75 (48)	25.15 (67)	19.56 (115)

Source of Variation	Sum of Sqs.	df	Variance Estimate	F	p
Rows (Aptitude levels)	771	2	385	F_r = 2.67	--
Columns (Methods)	4458	1	4458	F_c = 30.83	<.01
Interaction	270	2	135	F_i = .93	--
Within Cells	15179	105	145		
Total	21678	110			

The interaction term ($F_i = .93$) still falls short of significance. An F value of 3.09 would have been required for significance at the .05 level. Again we may say that there is no evidence of covariation between teaching method and aptitude level. It can also be noted that the total middle group made greater progress than the upper group. The reason may be that the Aptitude Test contained a few vocabulary items which have become less frequently used in the last ten or twenty years, so that the older students were favored. Consequently the division into aptitude levels may reflect not only aptitude but also, to some small extent, age. As was shown in Table 4.12, the upper age group made less progress than the two younger groups.

The difference between aptitude level means are not significant. The critical value of F at the .05 level is 3.09.

Figure 4.7 represents graphically the treatment effects at the three aptitude levels:

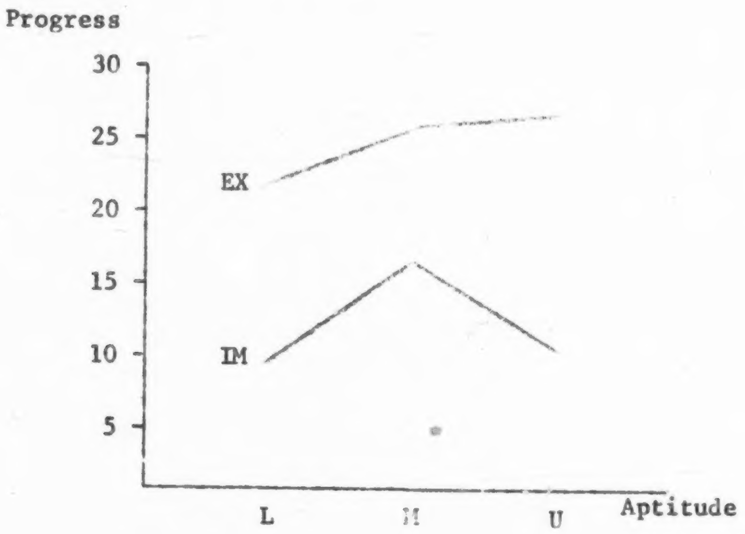

Figure 4.7 Progress results at three aptitude levels

Thus there is nothing in our data to suggest that a certain teaching method would be more suitable at one particular aptitude level than at another.

In summary of this section it may be stated that the effectiveness of the two methods did not significantly interact with student characteristics such as age, general proficiency in the language, and verbal aptitude. Comparisons were made at three levels of age, proficiency, and aptitude, both of post-test and progress results, but in no case could interaction effects be detected. Within our sample the difference in learning effect between IM and EX is the same irrespective of type of learner.

The learners over 40 scored significantly lower in the post-test than those who were 40 and younger. This is in part attributable to the difference in educational background between young and old subjects. There is also a slight tendency for younger learners to make greater progress, but the difference is not statistically significant.

It is clear, then, that our studies of interaction effects give no support to the common hypothesis that student characteristics are variables of greater importance than method in the language learning situation. The present data point in the opposite direction. Yet, the interaction of instructional techniques with student characteristics would seem to be worth further investigation, both with adult and adolescent students. Pleas for this kind of research have been made by Politzer (1970) and others.

4.2.7 Progress Over the Sexes

As we have seen before (Table 3.17), there was a larger percentage of females in the EX group than in the IM group. The distribution of the sexes were as follows (Table 4.17).

Table 4.17 Distribution of the Sexes over the Experimental Classes

	IM				EX				The Entire Sample
	01	02	03	Total	11	12	13	Total	
Males	12	8	9	29	5	3	5	13	42
Females	2	16	10	28	25	19	11	55	83
Total	14	24	19	57	30	22	16	68	125

There was an even balance in the IM group, but in the EX group there were more than four times as many females as males. To investigate whether this difference in frequencies is significant the value of Chi Square (X^2) was calculated (Table 4.18):

Table 4.18 Calculation of X^2 in Comparing Observed (O) and Expected Frequencies (E) of Males and Females in the Two Treatment Groups

Cell		O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Males	IM	29	19	10	100	5.26
	EX	13	23	-10	100	4.35
Females	IM	28	38	-10	100	2.63
	EX	55	45	10	100	2.22
Total		125	125	0		$X^2 = 14.46$

The value of X^2 is 14.46, which is greater than the critical value at the .01 level (= 6.64); thus the distribution of males and females over the two treatment groups deviates significantly from the expected or theoretical frequencies.

Because of this significant difference between the two samples it was also necessary to investigate whether the superiority of the EX group might be due to its larger proportion of female students. Theoretically, females may constitute a better experimental sample than males. To find an answer to this question the standings of the sexes on essential background variables were first checked. The computations are summarized in Table 4.19.

Table 4.19 A Comparison Between Male and Female Subjects on Five Background Variables

	Proficiency Test		PACT		Verbal Aptitude		Pre-test		Age	
	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
Males	30.38	9.09	33.55	11.06	52.94	8.51	57.33	16.76	28.90	7.13
Females	30.96	9.69	29.76	10.58	50.71	9.49	53.39	15.47	35.04	9.34
t	.33		1.82		1.21		1.26		4.09^{xx}	

The differences between means are all non-significant, except in the case of age; the female subjects are significantly older than the male subjects. We also know that there is negative correlation between age and post-test and progress results (see Tables 4.11, 4.12, and 4.29), and therefore it would actually seem to be to the disadvantage of the EX group to have a larger proportion of female subjects.

Next an analysis of variance of post-test results with sex as the independent variable was performed. The purpose was to find out whether the sexes had learnt equally much in the experiment (Table 4.20).

Table 4.20 Analysis of Variance. Dependent Variable: Post-Test
Independent Variable: Sex

	Treatment		Total
	IM	EX	
Males	70.93 (29)	76.92 (13)	72.79 (42)
Females	68.89 (28)	77.76 (55)	74.77 (83)
Total	69.93 (57)	77.60 (68)	74.10 (125)

Source of Variation	Sum of sqs.	df	Variance Estimate	F	p
Rows (Sexes)	110	1	110	F_r = .26	--
Columns (Methods)	1732	1	1732	F_c = 4.14	< .05
Interaction	50	1	50	F_i = .12	--
Within Cells	50624	121	418		

The difference between post-test means for the two rows, i.e. for the sexes, is not significant ($F_r = .26$). An F ratio of 3.92 is required for significance at the .05 level. The analysis also shows that there is no interaction between sex and teaching method ($F_i = .12$).

Still we cannot be fully satisfied with these findings as we have found that females started out with lower pre-test scores (Table 4.19) and yet achieved better results in the post-test. In order to compensate for this initial discrepancy between the sexes an analysis of covariance of post-test results was undertaken. The variable which correlated highest with the dependent variable was chosen as the covariate. The results are reported in Table 4.21.

Table 4.21 Analysis of Covariance. Dependent Variable: Post-Test
Covariate: Pre-Test

	Adjusted Means		F ratio	p	ss'_y		df	b_w
	IM	EX			Between	Within		
Males	70.19	78.57	6.82	<.05	627	3589	1/39	.93
Females	67.21	78.62	13.43	<.01	2403	14310	1/80	1.08

The differences between the methods still prevail when pre-test results are kept constant and when the results for male and female subjects are analyzed separately. The post-test results are about equal within each method. We can also see that the difference between DM and EX male subjects is smaller than the difference between DM and EX female subjects. The difference in treatment effects is more noticeable in the female sample.

This outcome, by the way, should not be attributed to sex alone. There is probably a multiplicity of variables tied to the variable of sex in an adult sample such as ours, and therefore it is advisable not to draw extensively on these results for discussions about sex differences in language learning.

As a cross-check the progress scores for the sexes were calculated. The means for males and females in the DM group were 12.79 and 13.93 respectively; the corresponding scores for the EX group were 21.38 and 25.16. The differences were too small to be statistically significant.

On the basis of this investigation we can fairly safely conclude that the unequal distribution of the sexes cannot have been the cause of the difference in learning results in the DM and EX groups.

4.2.8 Absence

In all, 13 subjects had been absent from more than two lessons (11 DM students and 2 EX students), and were therefore left out of the computations. These students are referred to as drop-outs, the students who had attended eight lessons or more are referred to as experimental subjects.

A full record of data was obtained for the drop-outs, as well as for the final experimental sample of 125 subjects. Table 4.22 presents the means of a number of variables for a comparison between the two groups:

Table 4.22 A Comparison Between the Final Experimental Sample and the Drop-Outs on Six Variables

	Age	Verbal Aptitude Test	Proficiency Test	PACT	Pre-test	General Attitude
Final Sample	33.0	51.4	30.8	31.1	54.7	24.8
Drop-Outs	27.5	50.4	35.8	39.0	66.0	24.8

The drop-outs tended to be younger and have better test results than the experimental students. The drop-outs, being more proficient, might actually have "dropped out" just because of this, that is, they might have thought that the experimental lessons were not quite up to their potentials as learners. The two groups did not differ in attitude toward the lesson series.

Progress scores were significantly lower for the drop-outs than for the experimental students, as Table 4.23 shows:

Table 4.23 A Comparison Between the Final Experimental Sample and the Drop-Outs on Progress Scores

	N	$\bar{x}$	x
Final Sample	125	19.38	13.33
Drop-Outs	13	11.31	6.25

$t = 3.84$ $(p < .01)$

The average absence rate among drop-outs was 3.8 lessons per individual and among experimental students .6 lessons per individual.

There was, furthermore, a difference between the two experimental groups in respect of attendance. The average absence rate among IM experimental students was .8 lessons per individual, and among EX students .5 lessons per individual. As the total number of lessons was 10, there is a 30:31 ratio between IM and EX attendance scores. Or, in other words, EX students had a 3 per cent higher attendance rate than IM students.

To test whether this difference between the treatment groups had contributed significantly to the main results, a check was made with those students who had attended all experimental lessons. The results are reported in Table 4.24:

Table 4.24 Progress Results for Subjects with a Full Attendance Record

	N	$\bar{x}$	s
IM	25	12.08	10.59
EX	44	26.93	12.45
t		5.02	$(p < .01)$

The substantial difference remains when the attendance variable is held constant. Therefore it can be assumed that absence was not a significant factor in the overall differential achievement.

4.3 Correlations

Introduction

The data were also subjected to correlation analyses involving all the variables in the experiment. Correlation coefficients (r), calculated by the Pearson product-moment formula, were obtained for the two treatment groups separately, as well as for the entire experimental sample as a whole. Three comprehensive matrices are given at the end of this section (Tables 4.32, 4.33, and 4.34). The critical values of correlation, i.e. the values at which the coefficient can be said to be significantly different from 0, are $r = .27$ for the IM group ($N = 57$), $r = .24$ for the EX group ($N = 68$), and $r = .18$ for the entire experimental sample ($N = 125$).

For convenience a table comparing IM and EX correlation coefficients has also been worked out (Table 4.31). This table must be used with caution as it is based on a comparison of the magnitudes of numerical values only. Reference should always be made to the correlation tables themselves, as nothing is said about degrees of difference. The reader is further reminded that the size of the correlation between two variables is a function of the sizes of the standard deviations (s). The greater the standard deviations the greater the coefficient is likely to be. It should be noted that the two treatment groups often differ with respect to the standard deviations. For easy reference a summary of the values of N, $\bar{x}$, and s for the main variables is given in Table 4.30.

The correlation coefficient is also affected by errors of measurement, which always appear as long as the tests are imperfect. The smaller the error of measurement (i.e. the more reliable the test) the higher and more dependable the coefficient.

Finally it is well to remember that correlation coefficients are not additive in nature, that is, they do not represent proportionate relationships. A coefficient of, say, .80 does not denote twice as high a correlation between two variables as a coefficient of .40. According to Ferguson (1966, p.127) a better estimate of proportions is obtained if the coefficients are squared (r^2). A coefficient of .80 would thus represent a degree of relationship which is four times as great as a coefficient of .40 ($.80^2 = .64$ and $.40^2 = .16$); the difference between coefficients of .70 and .80 would be three times as great as the difference between coefficients of .20 and .30. If r^2 is multiplied by 100 the degree of association can be conceptualized as a percentage.

The Proficiency Test

The Proficiency Test correlates well with our other tests of proficiency in English, which can be taken as evidence of satisfactory validity. The vocabulary part generally correlates higher with other tests than does the grammar part. This means that the former is a better instrument for assessing language proficiency. The correlations are summarized in Table 4.25:

Table 4.25 Correlations Between the Proficiency Test and Other Achievement Tests: The Entire Experimental Sample

	Proficiency Test		
	Vocabulary	Grammar	Total
PACT	.66	.45	.63
Pre-test: A	.69	.59	.72
Pre-test: B	.67	.59	.70
Pre-test: C	.73	.62	.76
Pre-test: Total	.75	.65	.79
Post-test: A	.70	.60	.73
Post-test: B	.62	.55	.65
Post-test: C	.64	.55	.66
Post-test: Total	.70	.60	.73
Oral Test: Part 1	.61	.32	.56
Oral Test: Part 2	.68	.55	.71
Oral Test: Total	.71	.49	.70
Term Test: Part 1	.51	.48	.55
Term Test: Part 2	.49	.57	.58
Term Test: Total	.55	58	.62

The reliability coefficients, which indicate the consistency in the test results, are .85 for the vocabulary part, .68 for the grammar part, and .87 for the total.

As appears from Table 4.32 there is a higher correlation in the IM group than in the EX group between Proficiency Test scores and scores on other tests, in particular pre- and post-tests and the Oral Test. This is at least partly due to the greater initial variation in proficiency test scores among IM students. The variation is smaller in the vocabulary part and therefore the tendency for higher correlation coefficients in the IM group is less pronounced on this variable.

The largest difference between IM and EX is found in the correlation between variables 1 and 5. In the IM group the correlation between the vocabulary part of the Proficiency Test and Pre-test A is .82, but in the EX group it is only .53. A test of this difference showed that it is statistically significant at the .01 level.[1] The difference cannot be attributed to the discrepancy in variance alone, because the relationship is not the same between variables 1 and 6 although the difference in variance is equally large. Further, the difference in the sizes of coefficients is largely the same for Post-test A ($p < .05$) which shows only a very small difference in variance between the two groups.

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[1] We have used the test of the significance of the difference between two correlation coefficients for independent samples described by Ferguson (1966), pp.187-188.

It is difficult to find an explanation of the difference, but we may state as a fact that there is a closer connection between performance on the vocabulary test and performance on Achievement Test A in the IM group than in the EX group. Causal factors may be the difference in age between the groups and the fact that Test A involves auditory stimuli.

PACT

The listening comprehension test (PACT) correlates .75 with the total of the Oral Test, which means that they measure much the same skill; more than half of the variance in the Oral Test, or 56 per cent, can be explained by the variance in PACT ($.75^2 = .56$).

In the IM group PACT correlates .85 with part 2 of the Oral Test. Expressed in terms of variance this means that 72 per cent of the variance in oral test scores could be predicted from the variance in PACT scores.

There is a high negative correlation between PACT results and age as could be expected. The coefficient of -.43 is statistically significant.

Pre-Test and Post-Test Correlations

There is generally a high correlation between the various parts of the Achievement Test (Table 4.26):

Table 4.26 Pre-Test and Post-Test Intercorrelations: The Entire Experimental Sample

		Pre				Post			
		A	B	C	Total	A	B	C	Total
Pre	A		.75	.76	.94	.69	.64	.59	.69
	B			.75	.92	.67	.69	.60	.71
	C				.87	.69	.63	.67	.71
Total						.75	.72	.66	.76
Post	A						.85	.83	.96
	B							.80	.95
	C								.90

The intercorrelations between the parts and the totals are very high and even. The subtest that correlates highest with the total is Test A, both in the pre-test and in the post-test. The correlation coefficient is .96 between Post-test A and Post-test Total. In practice this means that an almost identical discrimination between the subjects would have been obtained if we had used Test A as the criterion measure only. The coefficient of .96 corresponds to a 92 per cent association between Post-test A and Post-test Total. We can predict a subject's total score from his Test A score with a 92 per cent certainty. This can be taken as evidence that the new type of test that Test A represents is very useful indeed. Further proof of this is that Post-test A correlates higher than Post-tests B and C with most other achievement tests (Table 4.27):

Table 4.27 Pre- and Post-Test Correlations with Other Achievement Tests: The Entire Experimental Sample

	Pre			Post		
	A	B	C	A	B	C
Prof. Test: Voc.	.69	.67	.73	.70	.62	.64
Prof. Test: Gr.	.59	.59	.62	.60	.55	.55
Prof. Test: Tot.	.72	.70	.76	.73	.65	.66
PACT	.77	.66	.71	.65	.57	.58
Oral Test: P. 1	.52	.44	.53	.62	.47	.51
Oral Test: P. 2	.69	.63	.75	.79	.65	.75
Oral Test: Tot.	.67	.59	.71	.78	.62	.70
Term Test: P. 1	.38	.44	.46	.55	.51	.50
Term Test: P. 2	.40	.44	.52	.60	.60	.63
Term Test: Tot.	.43	.48	.54	.63	.61	.63
Verb. Apt. Test	.30	.28	.38	.32	.31	.38

The Oral Test

The correlations between the Oral Test and other tests are shown in Table 4.28:

Table 4.28 Correlations Between the Oral Test and Other Achievement Tests: The Entire Experimental Sample

	Oral Test		
	Part 1	Part 2	Total
Prof. Test: Voc.	.61	.68	.71
Prof. Test: Grammar	.32	.55	.49
Prof. Test: Total	.56	.71	.70
PACT	.66	.70	.75
Pre-test: A	.52	.69	.67
Pre-test: B	.44	.63	.59
Pre-test: C	.53	.75	.71
Pre-test: Total	.54	.75	.71
Post-test: A	.62	.79	.78
Post-test: B	.47	.65	.62
Post-test: C	.51	.75	.70
Post-test: Total	.58	.78	.75
Term Test: Part 1	.39	.32	.39
Term Test: Part 2	.46	.50	.54
Term Test: Total	.47	.46	.51

The correlations between the Oral Test and other criterion tests (Tests A, B, and C) are quite high. Ordinarily in language testing one might expect a less close relationship between the scores on an oral test and the scores on paper and pencil tests, since these two kinds of tests are supposed to measure different skills. In the present case, however, we tested a very specific skill (grammatical correctness) and therefore the correlation must be regarded both as an indication that oral and written proficiency in this skill go hand in hand and as evidence of the validity of the Oral Test.

It is reassuring to find that Part 2, the production part, generally has greater coefficients than Part 1, the recognition part. This is not due to the difference in variance between the two parts (see Table 4.30); the IM group, taken alone, shows the same tendency, although the standard deviations do not differ from each other. Therefore we may say that the higher correlations in Part 2 are indicative of better validity in Part 2 than in Part 1 of the test.

It can further be noticed that Part 2 correlates as highly as .78 with Post-test Total. This means that our criterion tests (A, B, and C) tapped skills which have very much in common with the skill it takes to produce grammatically acceptable spoken sentences. Converting the coefficient into a percentage figure we find that the degree of association between the two measures is such that approximately 60 per cent of the students' performance on Part 2 of the Oral Test could have been predicted from knowledge of the results in Post-test Total.

Age

Table 4.29 shows the relationship between age and other variables:

Table 4.29 Correlations Between Age and Other Variables: The Entire Experimental Sample

	Age		Age
Proficiency Test: Total	.06	Oral Test: Part 1	-.36
PACT	-.43	Oral Test: Part 2	-.24
Pre-test: A	-.26	Oral Test: Total	-.32
Pre-test: B	-.10	Term Test: Total	.03
Pre-test: C	-.14	Progress	-.07
Pre-test: Total	-.19	Verbal Aptitude Test	.26
Post-test: A	-.24	Other Subjects	-.37
Post-test: B	-.17	Work-load	-.03
Post-test: C	-.11	Absence	-.13
Post-test: Total	-.20	Attitude	-.04

In general there is a negative correlation between age and achievement on the various tests. Not surprisingly this is particularly noticeable on the tests which involve auditory discrimination and oral production (PACT, Pre-test A, Post-test A, and the Oral Test). The negative coefficients on the other tests are generally too small to be significant. The coefficients for the totals of the pre-test and the post-test indicate relationships of borderline significance. The older subjects can be said to have scored somewhat under average on the criterion tests, as we have also seen before (p.4:14). There is no correlation between age and progress results.

The correlation of age with results on the Verbal Aptitude Test suggests that the older subjects constituted a group with relatively good prospects of success in language learning, although they scored under the norm on the criterion tests. The correlation may also imply that the Aptitude Test favored the older students unduly. Considering the progress results of old vs. young students this would not seem improbable.

Table 4.30 Numbers of Observation, Means, and Standard Deviations for the Main Variables[1]

	IM			EX			IM+EX		
	N	$\bar{x}$	s	N	$\bar{x}$	s	N	$\bar{x}$	s
1. PROF.TEST: VOC.	57	15.47	6.71	68	15.28	5.74	125	15.37	6.18
2. PROF.TEST: GR.	57	15.53	4.41	68	15.26	4.22	125	15.38	4.29
3. PROF.TEST: TOT.	57	31.00	10.13	68	30.54	8.94	125	30.75	9.46
4. PACT	57	32.84	11.35	67	29.54	10.24	124	31.06	10.85
5. PRE-TEST: A	57	26.95	8.61	68	25.71	6.61	125	26.27	7.58
6. PRE-TEST: B	57	23.75	7.64	68	21.82	5.19	125	22.70	6.47
7. PRE-TEST: C	57	5.86	3.40	68	5.65	3.28	125	5.74	3.33
8. PRE-TEST: TOT.	57	56.56	18.32	68	53.18	13.57	125	54.72	15.93
9. PRE-TEST: STR.1	57	12.84	4.49	68	12.50	4.11	125	12.66	4.27
10. PRE-TEST: STR.2	57	8.51	2.83	68	8.13	2.80	125	8.30	2.81
11. PRE-TEST: STR.3	57	9.70	5.60	68	8.99	4.00	125	9.31	4.79
12. PRE-TEST: STR.4	57	13.54	4.45	68	12.91	3.83	125	13.20	4.12
13. PRE-TEST: STR.5	57	11.96	4.64	68	10.65	3.67	125	11.25	4.18
14. POST-TEST: A	57	33.00	9.31	68	36.59	9.17	125	34.95	9.37
15. POST-TEST: B	57	27.53	7.79	68	29.18	8.14	125	28.42	7.99
16. POST-TEST: C	57	9.40	4.16	68	11.84	4.39	125	10.73	4.44
17. POST-TEST: TOT.	57	69.93	20.03	68	77.60	20.53	125	74.10	20.58
18. POST-TEST: STR.1	57	14.91	4.57	68	15.19	4.35	125	15.06	4.44
19. POST-TEST: STR.2	57	10.95	3.58	68	11.87	3.91	125	11.45	3.77
20. POST-TEST: STR.3	57	11.51	6.56	68	13.12	6.78	125	12.38	6.70
21. POST-TEST: STR.4	57	16.47	4.59	68	19.63	4.80	125	18.19	4.95
22. POST-TEST: STR.5	57	16.09	5.16	68	17.79	5.42	125	17.02	5.35
23. ORAL TEST: P.1	39	22.33	5.83	56	23.46	4.47	95	23.00	5.08
24. ORAL TEST: P.2	39	10.33	5.75	56	12.68	5.75	95	11.72	5.84
25. ORAL TEST: TOT.	39	32.67	10.97	56	36.14	9.06	95	34.72	9.98
26. TERM TEST: P.1	53	33.06	5.27	66	31.21	6.00	119	32.03	5.74
27. TERM TEST: P.2	53	21.79	7.07	66	22.70	6.39	119	22.29	6.69
28. TERM TEST: TOT.	53	54.85	11.31	66	53.91	11.46	119	54.33	11.35
29. PROGRESS	57	13.37	10.12	68	24.43	13.67	125	19.38	13.33
30. VERB. APT.TEST	48	51.27	10.19	63	51.49	8.49	111	51.40	9.22
31. OTHER SUBJECTS	55	2.04	1.00	67	1.72	0.98	122	1.86	1.00
32. WORK-LOAD	55	1.69	0.47	67	1.60	0.49	122	1.64	0.48
33. AGE	57	30.68	8.08	68	34.90	9.53	125	32.98	9.11
34. ABSENCE	57	0.84	0.84	68	0.49	0.72	125	0.65	0.80
35. ATTITUDE	55	22.60	4.21	64	26.69	2.59	119	24.80	3.99

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[1] The greatest s of each pair in the two treatment groups has been underlined.

Table 4.31 A Comparison of IM and EX Correlation Coefficients for the Main Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1.PROF. TEST: VOC.	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	X	X	X	X	X	X	M	M	X	M	X
2.PROF. TEST: GR.		M	M	M	X	X	X	M	M	M	M	X	M	X	M	M	X	X	M	M	M	M	M	M	M	X	X	X	M	M	X	M	–M	∓
3.PROF. TEST: TOT.			M	M	M	M	M	M	M	M	M	M	M	M	M	M	X	M	M	M	M	M	M	M	X	X	X	X	M	M	M	X	∓	∓
4.PACT				M	M	M	M	M	M	M	X	M	M	M	M	M	M	M	M	M	M	M	M	M	X	X	X	X	X	M	M	–M	X	M
5.PRE-TEST: A					M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	X	X	∓	M	M	M	–X	±	M
6.PRE-TEST: B						X	M	M	M	M	M	M	M	M	M	M	M	X	M	M	X	M	M	M	X	X	X	∓	X	X	M	–M	–X	M
7.PRE-TEST: C							X	M	M	M	M	M	X	M	M	M	X	M	M	M	M	M	M	X	X	X	X	∓	M	M	M	–X	X	∓
8.PRE-TEST: TOT.								M	M	M	M	M	M	M	M	M	M	M	M	M	X	M	M	M	X	X	X	∓	M	M	M	–X	±	X
9.PRE-TEST: STR.1									M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	X	M	∓	X	M	M	–M	∓	M
10.PRE-TEST: STR.2										M	M	M	M	X	M	M	M	M	X	M	M	M	M	M	M	X	X	∓	M	M	M	–X	±	∓
11.PRE-TEST: STR.3											M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	X	X	–M	M	M	M	–X	±	±
12.PRE-TEST: STR.4												M	M	M	M	M	M	M	M	M	X	M	M	M	M	M	M	∓	M	∓	M	±	±	X
13.PRE-TEST: STR.5													M	M	M	M	M	M	X	M	M	X	M	M	X	X	X	∓	X	M	M	–M	±	X
14.POST-TEST: A														X	M	M	M	M	X	M	X	M	M	M	X	X	X	X	M	M	M	–X	±	X
15.POST-TEST: B															X	X	M	X	M	X	X	M	X	X	X	X	X	X	X	M	M	–M	±	M
16.POST-TEST: C																X	M	M	X	M	M	M	M	M	X	X	X	X	M	M	M	–M	±	±
17.POST-TEST: TOT.																	M	M	X	M	X	M	M	M	X	X	X	X	M	M	M	–X	±	X
18.POST-TEST: STR.1																		M	M	M	X	M	X	X	X	X	X	X	X	M	±	–M	±	M
19.POST-TEST: STR.2																			X	M	X	M	M	M	M	X	X	X	M	M	M	–M	±	∓
20.POST-TEST: STR.3																				X	X	M	M	M	X	X	X	X	M	M	X	–X	±	X
21.POST-TEST: STR.4																					M	M	M	M	X	X	X	X	M	M	±	–X	±	∓
22.POST-TEST: STR.5																						M	X	X	X	X	X	X	X	M	X	–X	±	X
23.ORAL TEST: P.1																							M	M	X	M	M	X	X	M	M	–M	∓	±
24.ORAL TEST: P.2																								M	X	X	X	X	X	M	M	–M	∓	X
25.ORAL TEST: TOT.																									X	X	X	X	X	M	M	–M	∓	M
26.TERM TEST: P.1																										X	X	X	X	±	±	∓	–M	∓
27.TERM TEST: P.2																											M	X	X	±	±	±	–M	∓
28.TERM TEST: TOT.																												X	X	±	±	M	–X	∓
29.PROGRESS																													X	M	X	–M	±	–M
30.VERB. APT. TEST																														±	±	M	±	∓
31.OTHER SUBJECTS																															M	–X	X	±
32.WORK-LOAD																																∓	M	M
33.AGE																																	–X	∓
34.ABSENCE																																		±
35.ATTITUDE																																		

Notation:

M	IM has the greater positive coefficient
X	EX has the greater positive coefficient
–M	IM has the greater negative coefficient
–X	EX has the greater negative coefficient
±	IM coefficient positive, EX negative
∓	IM coefficient negative, EX positive

Table 4.32 Correlations Between Main Variables: The IM Group (N: See Table 4.30)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)
(1) PROFICIENCY TEST: VOCABULARY	.64	.94	.72	.82	.71	.77	.82	.76	.67	.57	.72	.72	.82	.64	.72	.78	.67	.56	.61	.71	.64	.62	.70	.70	.50	.47	.53	.05	.41	.29	.39	.00	.08	.04
(2) PROFICIENCY TEST: GRAMMAR		.86	.51	.65	.58	.59	.66	.57	.55	.47	.62	.54	.66	.55	.59	.65	.42	.41	.60	.63	.52	.47	.62	.57	.49	.55	.57	.09	.41	.12	.22	.15	-.20	-.16
(3) PROFICIENCY TEST: TOTAL			.70	.83	.72	.76	.83	.75	.69	.58	.75	.71	.83	.67	.73	.80	.63	.55	.67	.74	.65	.65	.77	.75	.55	.55	.60	.08	.45	.25	.35	.06	-.03	-.04
(4) PACT				.80	.72	.75	.82	.75	.66	.67	.59	.73	.80	.69	.73	.79	.73	.52	.68	.65	.62	.70	.85	.82	.34	.36	.38	.08	.19	.41	.48	-.42	.01	.15
(5) PRE-TEST: A					.80	.81	.95	.87	.76	.80	.79	.73	.82	.76	.76	.83	.72	.60	.73	.72	.62	.62	.82	.76	.42	.37	.43	-.08	.40	.23	.35	-.14	.09	.14
(6) PRE-TEST: B						.75	.93	.78	.67	.85	.73	.79	.77	.77	.70	.81	.68	.50	.78	.63	.63	.50	.69	.63	.37	.36	.40	-.09	.24	.18	.23	-.09	-.01	.09
(7) PRE-TEST: C							.88	.77	.73	.70	.72	.76	.71	.66	.72	.74	.53	.51	.66	.64	.61	.57	.78	.71	.46	.51	.54	-.14	.41	.28	.26	-.03	.04	.00
(8) PRE-TEST: TOTAL								.88	.77	.86	.81	.82	.84	.80	.78	.86	.72	.59	.79	.72	.67	.61	.82	.75	.44	.42	.47	-.10	.36	.23	.31	-.11	.05	.10
(9) PRE-TEST: STRUCTURE 1									.66	.71	.64	.62	.77	.70	.72	.78	.71	.62	.67	.64	.56	.63	.77	.74	.44	.39	.45	-.04	.23	.33	.40	-.21	-.04	.21
(10) PRE-TEST: STRUCTURE 2										.53	.57	.60	.62	.53	.58	.62	.48	.47	.52	.52	.52	.64	.66	.69	.29	.35	.35	-.18	.30	.27	.37	-.02	.10	-.02
(11) PRE-TEST: STRUCTURE 3											.60	.61	.68	.75	.65	.74	.58	.48	.84	.49	.55	.38	.63	.53	.28	.20	.25	-.09	.33	.18	.14	-.11	.07	.09
(12) PRE-TEST: STRUCTURE 4												.54	.68	.65	.64	.70	.58	.40	.61	.74	.51	.49	.64	.60	.43	.44	.48	-.07	.30	-.10	.20	.06	.06	.04
(13) PRE-TEST: STRUCTURE 5													.70	.64	.64	.71	.61	.47	.57	.61	.62	.45	.69	.60	.37	.40	.42	-.07	.34	.31	.25	-.16	.03	.07
(14) POST-TEST: A														.84	.84	.97	.82	.70	.80	.84	.78	.70	.83	.81	.53	.47	.54	.39	.34	.34	.34	-.24	.06	.03
(15) POST-TEST: B															.77	.94	.78	.63	.83	.78	.77	.52	.61	.59	.36	.45	.45	.41	.28	.18	.19	-.21	.13	.09
(16) POST-TEST: C																.90	.70	.68	.72	.76	.81	.60	.77	.73	.49	.53	.56	.36	.44	.28	.32	-.20	.05	.04
(17) POST-TEST: TOTAL																	.83	.71	.84	.85	.83	.67	.80	.77	.49	.51	.55	.41	.36	.29	.30	-.23	.03	.06
(18) POST-TEST: STRUCTURE 1																		.59	.60	.63	.58	.52	.60	.59	.28	.20	.25	.33	.14	.23	.42	-.44	.14	.29
(19) POST-TEST: STRUCTURE 2																			.44	.57	.49	.46	.59	.55	.46	.39	.46	.35	.45	.36	.33	-.23	.00	-.09
(20) POST-TEST: STRUCTURE 3																				.61	.61	.50	.68	.62	.34	.29	.34	.23	.28	.22	.19	-.07	.02	.02
(21) POST-TEST: STRUCTURE 4																					.68	.73	.70	.76	.53	.63	.64	.38	.28	.19	.23	-.14	.08	-.08
(22) POST-TEST: STRUCTURE 5																						.50	.63	.60	.41	.59	.56	.44	.35	.22	.13	-.14	.13	.09
(23) ORAL TEST: PART 1																							.80	.95	.39	.33	.39	.18	.08	.37	.45	-.43	-.11	.14
(24) ORAL TEST: PART 2																								.95	.48	.40	.49	.07	.33	.48	.50	-.38	-.09	.20
(25) ORAL TEST: TOTAL																									.46	.39	.47	.13	.22	.45	.50	-.43	-.11	.18
(26) TERM TEST: PART 1																										.67	.89	.16	.28	.15	.09	-.01	-.19	-.33
(27) TERM TEST: PART 2																											.94	.22	.31	.09	.05	.11	.00	-.27
(28) TERM TEST: TOTAL																												.22	.32	.13	.08	.07	-.09	-.33
(29) PROGRESS																													.05	.15	.03	-.25	.09	-.07
(30) VERBAL APTITUDE TEST																														.09	.07	.47	.09	-.18
(31) OTHER SUBJECTS																															.42	-.34	.10	.13
(32) WORK-LOAD																																-.24	.08	.13
(33) AGE																																	-.01	-.21
(34) ABSENCE																																		.14
(35) ATTITUDE																																		

Table 4.33 Correlations Between Main Variables: The EX Group (N: See Table 4.30)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)
(1) PROFICIENCY TEST: VOCABULARY	.60	.93	.61	.53	.63	.70	.67	.62	.44	.28	.48	.64	.62	.61	.63	.65	.64	.47	.50	.51	.55	.59	.67	.72	.53	.52	.57	.32	.41	.08	.06	.02	.04	.08
(2) PROFICIENCY TEST: GRAMMAR		.86	.39	.54	.63	.65	.66	.42	.44	.43	.49	.64	.57	.56	.57	.60	.50	.46	.54	.39	.51	.20	.50	.41	.47	.61	.59	.25	.25	.05	.22	.14	-.06	.03
(3) PROFICIENCY TEST: TOTAL			.57	.59	.70	.76	.74	.60	.49	.38	.54	.71	.67	.66	.67	.70	.65	.52	.58	.51	.60	.47	.67	.66	.56	.62	.64	.32	.38	.07	.14	.08	.00	.06
(4) PACT				.72	.57	.68	.73	.73	.42	.42	.60	.51	.62	.51	.58	.61	.61	.27	.53	.42	.58	.65	.65	.73	.36	.44	.44	.18	.23	.27	.13	-.41	.08	.02
(5) PRE-TEST: A					.66	.71	.91	.80	.65	.62	.67	.61	.62	.56	.53	.61	.63	.25	.60	.34	.59	.42	.60	.59	.33	.47	.43	.02	.19	.13	.06	-.35	-.09	.12
(6) PRE-TEST: B						.78	.89	.69	.63	.63	.60	.73	.69	.70	.68	.73	.59	.51	.68	.50	.65	.40	.65	.61	.51	.59	.59	.21	.34	.18	.07	-.05	-.05	.08
(7) PRE-TEST: C							.89	.70	.54	.57	.67	.75	.72	.62	.70	.72	.66	.49	.63	.49	.60	.51	.74	.72	.47	.54	.54	.19	.36	.11	.02	-.21	.06	.15
(8) PRE-TEST: TOTAL								.82	.69	.68	.72	.76	.74	.69	.69	.75	.69	.44	.70	.47	.68	.48	.72	.70	.47	.58	.57	.14	.31	.16	.06	-.24	-.05	.13
(9) PRE-TEST: STRUCTURE 1									.53	.45	.46	.55	.55	.49	.53	.55	.63	.29	.51	.27	.48	.43	.61	.60	.31	.48	.43	.01	.27	.15	.04	-.17	.07	.01
(10) PRE-TEST: STRUCTURE 2										.33	.39	.43	.54	.55	.51	.57	.42	.47	.54	.35	.50	.24	.57	.48	.29	.40	.37	.17	.17	.08	.05	-.10	-.05	.00
(11) PRE-TEST: STRUCTURE 3											.30	.35	.40	.38	.30	.40	.42	.10	.41	.21	.39	.25	.38	.36	.22	.30	.28	-.08	.15	.14	.02	-.21	-.15	-.08
(12) PRE-TEST: STRUCTURE 4												.46	.58	.51	.59	.59	.47	.33	.54	.46	.53	.38	.56	.54	.39	.43	.45	.17	.18	.01	.05	-.26	-.01	.36
(13) PRE-TEST: STRUCTURE 5													.68	.63	.61	.68	.58	.47	.61	.46	.61	.46	.56	.58	.52	.54	.57	.27	.36	.19	.08	-.12	-.05	.20
(14) POST-TEST: A														.86	.81	.96	.71	.67	.85	.77	.83	.56	.74	.75	.65	.72	.74	.70	.31	.17	.16	-.34	-.17	.05
(15) POST-TEST: B															.83	.96	.69	.69	.81	.79	.85	.42	.65	.62	.64	.71	.73	.75	.35	.14	.12	-.20	-.19	.04
(16) POST-TEST: C																.90	.68	.61	.81	.71	.79	.45	.73	.69	.63	.73	.74	.67	.36	.15	.11	-.17	-.16	-.18
(17) POST-TEST: TOTAL																	.74	.70	.87	.81	.88	.52	.75	.73	.68	.76	.77	.76	.35	.16	.14	-.27	-.18	.08
(18) POST-TEST: STRUCTURE 1																		.35	.52	.52	.63	.45	.64	.62	.55	.57	.61	.42	.23	.13	-.04	-.25	-.04	.00
(19) POST-TEST: STRUCTURE 2																			.57	.47	.53	.33	.46	.45	.42	.52	.51	.62	.34	.12	.18	-.06	-.02	.04
(20) POST-TEST: STRUCTURE 3																				.61	.69	.45	.62	.62	.51	.64	.62	.61	.26	.20	.26	-.26	-.23	.05
(21) POST-TEST: STRUCTURE 4																					.65	.35	.50	.49	.67	.64	.70	.74	.26	.05	-.02	-.25	-.15	.03
(22) POST-TEST: STRUCTURE 5																						.43	.70	.66	.59	.65	.67	.65	.35	.14	.15	-.22	-.23	.16
(23) ORAL TEST: PART 1																							.56	.85	.41	.30	.38	.27	.17	.32	.10	-.38	.30	-.06
(24) ORAL TEST: PART 2																								.91	.48	.55	.57	.37	.41	.14	.07	-.25	.14	.21
(25) ORAL TEST: TOTAL																									.51	.50	.55	.37	.34	.25	.09	-.34	.23	.11
(26) TERM TEST: PART 1																										.71	.92	.55	.37	-.15	-.11	.03	-.19	.04
(27) TERM TEST: PART 2																											.93	.56	.35	-.05	-.01	-.02	-.10	.03
(28) TERM TEST: TOTAL																												.60	.38	-.11	-.06	.03	-.15	.04
(29) PROGRESS																													.23	.09	.15	-.16	-.23	-.01
(30) VERBAL APTITUDE TEST																														-.07	-.05	.14	-.20	.23
(31) OTHER SUBJECTS																															.23	-.35	.11	-.15
(32) WORK-LOAD																																.14	.05	.06
(33) AGE																																	-.15	.07
(34) ABSENCE																																		-.09
(35) ATTITUDE																																		

Table 3.34 Correlations Between Main Variables: The Entire Experimental Sample (N: See Table 4.30)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)
(1) PROFICIENCY TEST: VOCABULARY	.62	.93	.66	.69	.67	.73	.75	.70	.55	.44	.61	.68	.70	.62	.64	.70	.65	.50	.55	.57	.58	.61	.68	.71	.51	.49	.55	.18	.41	.18	.22	.01	.07	.04
(2) PROFICIENCY TEST: GRAMMAR		.86	.45	.59	.59	.62	.65	.49	.49	.45	.56	.58	.60	.55	.55	.60	.46	.43	.56	.46	.51	.32	.55	.49	.48	.57	.58	.16	.33	.09	.22	.13	-.12	-.09
(3) PROFICIENCY TEST: TOTAL			.63	.72	.70	.76	.79	.68	.58	.49	.65	.71	.73	.65	.66	.73	.63	.52	.61	.58	.61	.56	.71	.70	.55	.58	.62	.19	.42	.16	.24	.06	-.01	-.02
(4) FACT				.77	.66	.71	.78	.74	.54	.56	.60	.64	.65	.57	.58	.64	.66	.36	.57	.44	.56	.66	.70	.75	.37	.38	.41	.06	.20	.35	.31	-.43	.07	.01
(5) PRE-TEST: A					.75	.76	.94	.83	.70	.73	.74	.68	.69	.64	.59	.69	.67	.40	.64	.47	.57	.52	.69	.67	.38	.40	.43	-.06	.30	.19	.21	-.26	.03	.08
(6) PRE-TEST: B						.75	.92	.73	.65	.77	.67	.77	.67	.69	.60	.71	.62	.46	.69	.47	.58	.44	.63	.59	.44	.44	.48	-.01	.28	.20	.17	-.10	.01	.00
(7) PRE-TEST: C							.87	.73	.63	.63	.69	.75	.69	.63	.67	.71	.60	.49	.64	.52	.59	.53	.75	.71	.46	.52	.54	.04	.38	.19	.13	-.14	.06	.04
(8) PRE-TEST: TOTAL								.85	.73	.79	.77	.79	.75	.72	.66	.76	.69	.48	.72	.52	.63	.54	.75	.71	.45	.48	.51	-.02	.33	.21	.20	-.19	.03	.04
(9) PRE-TEST: STRUCTURE 1									.59	.59	.55	.58	.64	.58	.58	.64	.67	.43	.58	.40	.51	.52	.67	.66	.37	.43	.44	-.03	.25	.24	.21	-.19	.02	.10
(10) PRE-TEST: STRUCTURE 2										.44	.48	.52	.55	.53	.50	.57	.44	.45	.52	.38	.49	.42	.59	.56	.29	.37	.37	.00	.23	.18	.20	-.08	.04	-.04
(11) PRE-TEST: STRUCTURE 3											.47	.51	.52	.55	.44	.55	.50	.28	.61	.31	.45	.32	.49	.45	.25	.23	.26	-.10	.25	.17	.09	-.17	-.01	-.01
(12) PRE-TEST: STRUCTURE 4												.51	.60	.56	.56	.61	.52	.35	.56	.53	.50	.42	.58	.55	.41	.43	.46	.03	.24	-.03	.13	-.13	.04	.09
(13) PRE-TEST: STRUCTURE 5													.63	.60	.55	.64	.58	.44	.55	.45	.56	.45	.60	.58	.46	.45	.49	.04	.34	.27	.18	-.16	.03	.02
(14) POST-TEST: A														.85	.83	.96	.75	.69	.83	.80	.81	.62	.79	.78	.55	.60	.63	.59	.32	.21	.22	-.24	-.09	.14
(15) POST-TEST: B															.80	.95	.73	.67	.82	.77	.82	.47	.65	.62	.51	.60	.61	.60	.31	.14	.14	-.17	-.06	.13
(16) POST-TEST: C																.90	.67	.64	.77	.75	.81	.51	.75	.70	.50	.63	.63	.60	.38	.16	.17	-.11	-.12	.23
(17) POST-TEST: TOTAL																	.77	.71	.86	.83	.86	.58	.78	.75	.56	.64	.66	.63	.35	.19	.19	-.20	-.09	.16
(18) POST-TEST: STRUCTURE 1																		.46	.55	.55	.61	.49	.63	.62	.43	.40	.45	.36	.19	.17	.16	-.31	.04	.18
(19) POST-TEST: STRUCTURE 2																			.52	.52	.52	.39	.53	.51	.41	.46	.48	.52	.38	.20	.23	-.10	-.04	.04
(20) POST-TEST: STRUCTURE 3																				.61	.66	.47	.66	.52	.41	.48	.49	.47	.27	.19	.21	-.15	-.13	.10
(21) POST-TEST: STRUCTURE 4																					.67	.50	.59	.60	.53	.62	.63	.65	.25	.05	.05	-.11	-.11	.14
(22) POST-TEST: STRUCTURE 5																						.47	.69	.64	.48	.62	.61	.58	.34	.15	.12	-.14	-.09	.19
(23) ORAL TEST: PART 1																							.67	.90	.39	.32	.39	.25	.13	.33	.24	-.36	.06	.12
(24) ORAL TEST: PART 2																								.93	.46	.50	.54	.32	.38	.25	.22	-.24	.00	.27
(25) ORAL TEST: TOTAL																									.47	.46	.51	.31	.29	.31	.25	-.32	.03	.22
(26) TERM TEST: PART 1																										.67	.90	.31	.32	.00	-.01	-.03	-.15	.22
(27) TERM TEST: PART 2																											.93	.41	.33	.00	.01	.07	-.06	-.10
(28) TERM TEST: TOTAL																												.39	.35	.00	.00	.03	-.11	-.17
(29) PROGRESS																													.14	.03	.06	-.07	-.17	.20
(30) VERBAL APTITUDE TEST																														.01	.01	.26	-.05	-.01
(31) OTHER SUBJECTS																															.32	-.37	.13	-.06
(32) WORK-LOAD																																-.03	.08	.03
(33) AGE																																	-.13	.04
(34) ABSENCE																																		-.07
(35) ATTITUDE																																		

4.4 Attitudes

The subjects proved very cooperative in the Attitude Test and responded to the large majority of questions, even the open ones.

Since, with the exception of three open questions, the Attitude Test was of multiple-choice type, the alternatives were assigned numerical values so that data could be processed. Means, standard deviations, frequency distributions, and correlations were thus computed for each item. The most important statistical data have been compiled in two tables (4.36 and 4.37), presented in this section. The reader is also referred to Appendix 3, which includes the entire questionnaire both in its original form and in translation.

4.4.1 General Attitude

Seven items in the test measured the students´ general attitudes toward the experiment. Four of these items (1, 2, 4, and 7) were identical for both experimental groups, whereas three (11a, 12, and 13) were different in that they measured attitudes toward the main feature of each method: the oral drills in the IM method and the explanations in the EX method. These seven items are listed first in the two tables referred to above.

They all had 5-point scales except for No. 7 which had three response alternatives only; in the analyses these were assigned the numerical values 1, 3, and 5. The theoretical mean of the composite scale is 21.0. The higher the means the more positive the students´ attitudes toward the experimental treatment. An ocular inspection of the results of these particular items shows substantial differences between the two groups, corresponding to about half a grade in a 5-grade system (see Table 4.36). In order to assess more reliably whether one particular method proved statistically more attractive than the other, we applied a non-parametric test, the Mann-Whitney $\underline{U}$ test, which is relevant in a 2-sample case (Siegel, 1956). The assumption behind this test is that the scales represent at least ordinal measurement; the test compares ranks, not absolute scores in the two groups. The $\underline{U}$-statistic is transformed into a $\underline{z}$-value (Table 4.35).

Table 4.35 General Attitude. Treatment Groups Compared

Item No.	Mean ranks		z
	IM (N = 55)	EX (N = 64)	
1	43.99	73.76	4.693**
2	48.46	69.91	3.382**
4	49.16	69.32	3.177**
7	53.93	65.23	1.780
11a	46.04	72.00	4.093**
12	55.76	63.64	1.242
13	46.33	71.75	4.008**
Total	41.56	75.84	5.405**

As is apparent, the EX students had a significantly more positive attitude toward their treatment than the IM students.

4.4.2 Attitude Specific

The results of the remaining items will be presented and interpreted on the basis of mean scores and frequency of answers. Because of the difference in the number of subjects between the two treatment groups frequency distributions are given in percentages in Table 4.37.

Item 3. The majority of students found the standard of difficulty of the course "just right", although the means tend toward "somewhat difficult" in both groups. There is a small difference in the means, which indicates that the IM students found their treatment slightly more difficult than did the EX students. It appears that in spite of differences in method between the two lesson series their levels of difficulty were largely the same.

Item 5 is similar to Item 4 both with respect to content and results. EX students were more positive in recommending the course for self-instruction than the IM students. Table 4.37 reveals that only IM students checked alternatives coded 1 or 2. It should be noted that the means for both groups are about half a grade higher on this item than on Item 4, which indicates that the subjects must have found the "Special Course" more adequate as extra-classroom activity. In view of the passive role of the teacher during the experimental lessons, this is not surprising.

Item 6, again, shows a half-grade difference between the two treatment groups: while the majority of the IM students thought the course would have been a little better if the teacher had taught the lessons, for most EX students it made no difference. A plausible interpretation is that the difference between treatment groups follows naturally from the students' general attitudes: the IM students gave their treatment a less favorable evaluation, and, therefore, there was more room for improvement. Another interpretation may be that the success of the IM method is more dependent on the live teacher than the EX method. It must not be overlooked, however, that the two groups were taught by different teachers. This fact makes us reluctant to draw conclusions from the results of this item.

Items 8a and 8b concerned the dialogues. Although identical in the two treatments, the dialogues were presented in different manners.

The slight difference on 8a indicates that the EX students found the dialogues more difficult. If this small difference is to be interpreted at all, it seems logical to relate it to the proficiency levels of the two groups. As measured by all pre-experimental tests and the term test, the EX students had a somewhat lower proficiency in English. Therefore, it is natural that they should find the dialogues more difficult.

The difference on 8b was more substantial, showing clearly that the EX students found the dialogues better than did the IM students. Although it is somewhat surprising that the same dialogues should receive different "grades" on their quality, it is possible that this reflects attitudinal differences toward the two modes of teaching, the more so as the dialogues were presented in essentially different ways in the two treatments.

Finally, we have to admit that the item was somewhat ambiguous, as it was not clear whether the quality of the dialogues should be evaluated with respect to content or language.

Items 9a and 9b questioned the subjects on the written exercises. Item 9a parallels 8a, i.e. it concerns level of difficulty. Again, the difference between the treatment groups is negligible, although this time it was the IM students that found the detail in question more difficult. It must be noted that only about half of the written exercises were identical in the two treatments.

In spite of the fact that the number of written exercises and the time alotted to them also differed in the two treatments, the means and frequency distribution are strikingly equal in the two groups. Since the means are below 3, the students would obviously have liked to have more written exercises. As many as one third of the students found that written exercises were somewhat too few.

Item 10 tested the students on their attitude toward another detail included in both treatments in equal amounts: reading in chorus. Again, practically no difference is found, but a good number of the students thought that there was "a little too much" of reading in chorus.

Item 11b. Similarly to Item 11a, 12, and 13, this item is on pattern drills and explanations respectively. According to the results of this item, it was thought that there were slightly too many pattern drills, while there were slightly too few explanations. The results are well in line with the other items involving pattern drills and explanations respectively. Attention should be paid to class 01 which breaks the otherwise even pattern not only on this item but on a number of others, by showing a clearly more positive attitude toward both the entire course and its details than the other two IM classes. As has been pointed out before, this small class also deviated from the others in other respects.

Item 17. This item was included to get an idea to what extent the students have followed up experimental lessons outside the classroom. It was shown in Section 3.4.6 that the groups as a whole did hardly any follow up work on the structures included in the experimental course material. Group and class means show that on the whole the IM students did more follow up work, although the highest mean is found with the day class. This may very well be due to the fact that the day group had the largest number of housewives and full-time students, who could probably devote more time to studies than the other groups, which consisted mainly of full-time workers.

Item 18 and 19, inquiring about motives for studying English and attitude toward languages, have also been dealt with before (Section 3.3.1). Both items show very even means and distribution of frequency not only with respect to treatment groups, but also to classes. Since the Attitude Test was administered after the experiment, it is difficult to regard these two variables as independent. However, in view of the evenness of the scores, it seems very unlikely that the experiment should have influenced the attitudes of the students toward English and their motivation to study it. We venture to conclude that with respect to these variables the experimental subjects constituted two very similar and homogeneous groups.

Item 20 was an attempt to elicit a decided position for or against the treatment the student was subjected to. However, as the large percentage of blanks shows, many students were either unwilling to take such a position, or else expressed a neutral attitude, for example by putting the cross in between the two alternatives. Such replies were, of course, not taken into consideration. If the two alternatives are to be interpreted as expressions of favorable and unfavorable attitudes respectively, we can conclude that the majority of the subjects had a positive attitude toward the experimental lessons. However, the distribution of answers is very different in the two treatment groups, showing a clearly more positive attitude on the part of the EX students. Again, the technical and the day classes represent extremes within their groups, expressing the most positive and most negative attitudes respectively.

The Open Questions: Items 14, 15, and 16. These items do not yield information of any particular interest. Students usually repeat, more explicitly and more emphatically, what they have already stated.

What they appreciated most in the "Special Course" (Item 14) were: the opportunity of hearing native speakers, the change these lessons brought into their regular course, the variety of activities included in these lessons, and the music.

The most common criticism (Item 15) was, as expected, that they were not allowed to keep the workbooks. Some found that the pauses were too short, and/or the pace too fast.

There was considerable overlap between recommendations for improving the course (Item 16) and the answers to the two previous questions. Apparent was the desire for more written exercises and for cutting out reading in chorus as "meaningless" or "useless" activity. No definite pattern of difference between the two treatment groups can be traced in the responses to the open questions.

4.4.3 Summary

The most important finding resulting from the Attitude Test is that the EX treatment proved clearly more attractive than the IM treatment. The significant difference in the general attitude demonstrated in Table 4.35 is further confirmed by the scores of all items in which the students were to express opinion of, or attitude toward, the treatment they were subjected to, or its main characteristic feature (Items 5, 6, 11b, and 20).

It is also apparent that the differences on items concerning details of the lessons are small, sometimes negligible. Since these details were often identical or similar in the two treatments, this result is not surprising if we assume that the two groups are comparable.

Differences were equally small on items in which the subjects were questioned on their motives for studying English, and their attitudes toward the subject (Items 18 and 19). The similarity on these items can be regarded as proof of the inner validity of the test. Hence the differences on general attitudes seem even more convincing.

Further inspection of the results of the test items referring to various details of instruction allows us to conclude that explanations (11a, 12, 13, and 11b) and written exercises (9a and 9b) were popular rather than unpopular, whereas the opposite goes for pattern drills (11a, 12, 13, and 11b) and reading in chorus (10). Teachers with experience from teaching adults will perhaps not be surprised at these findings.

Items inquiring about the level of difficulty of either the entire course or certain details (3, 8a, and 9a) show that the majority of students checked alternative 3, corresponding to "right level of difficulty", though the means tended to end up on the difficult side. This can be interpreted as proof of success in devising the experimental lessons so as to fit the proficiency and aptitude level of the majority of the subjects. As regards the level of difficulty of the pattern drills and explanations (Item 11a), the trend is different from the three items commented on above. Pattern drills were found by a slight majority of IM students "somewhat difficult", while explanations were the only feature judged easy rather than difficult.

A look at Table 4.36 reveals that the two classes differing from the others in several respects, namely the technical class (01) and the day class (11), deviated from the rest also with respect to attitudes. 01 had the most positive attitude among IM classes, while 11 was the most negative of the three EX classes. Thus the two classes had a levelling effect on the differences between the two treatment groups. Since these classes deviated from the others mainly with respect to age and distribution by the sexes, the implications are that male students and younger students had a more favorable attitude to the experiment than females and older students.

Table 4.36 The Attitude Test. Class and Group Means

ITEM NO.	ITEM	IM (N = 57)				EX (N = 68)				ENTIRE SAMPLE (N = 125)
		01	02	03	TOTAL	11	12	13	TOTAL	
	Attitude general									
1.	The course as a whole was: of no value (1) - of great value (5)	4.00	3.67	3.39	3.65	4.30	4.57	4.31	4.39	4.05
2.	The lessons were: very boring (1) - very enjoyable (5)	3.85	3.29	3.39	3.45	3.81	4.43	3.88	4.03	3.76
4.	Would you recommend the course in the present form? Absolutely not (1) - Absolutely (5)	4.31	3.42	3.56	3.67	4.11	4.48	4.63	4.36	4.04
7.	Change of attitude toward the course: more negative (1), same (3), more positive (5)	3.92	3.42	3.22	3.47	3.81	3.86	4.25	3.94	3.72
11A	The pattern drills/explanations were: very difficult (1) - very easy (5)	2.62	2.50	2.44	2.51	3.33	3.05	3.19	3.20	2.88
12.	The pattern drills/explanations were: not effective at all (1) - very effective (5)	3.54	3.42	3.28	3.40	3.70	3.52	3.94	3.70	3.56
13.	The pattern drills/explanations should be: replaced entirely (1) - increased very much (5)	2.69	2.21	2.56	2.44	3.07	3.10	3.00	3.06	2.77
	Attitude general Total	24.92	21.92	21.83	22.60	26.15	27.00	27.19	26.69	24.80
	Attitude specific									
3.	The course was: much too easy (1) - much too difficult (5)	3.36	3.46	3.67	3.50	3.37	3.32	3.38	3.35	3.42
5.	Would you recommend the course for self-instruction? Absolutely not (1) - Absolutely (5)	4.07	4.08	3.68	3.95	4.70	4.59	4.69	4.66	4.34
6.	The course with the live teacher would have been: much worse (1) - much better (5)	3.93	3.91	4.05	3.96	3.50	3.10	3.19	3.29	3.61
8A	The dialogues were: much too easy (1) - much too difficult (5)	3.00	3.46	3.21	3.26	3.37	3.36	3.25	3.34	3.30
8B	The dialogues were: very bad (1) - very good (5)	4.00	3.63	3.89	3.89	4.00	4.27	4.07	4.12	4.01
9A	The written exercises were: much too easy (1) - much too difficult (5)	3.00	3.25	3.61	3.30	3.20	3.23	3.20	3.21	3.25
9B	The written exercises were: far too few (1) - far too many (5)	2.46	2.92	2.84	2.79	2.84	2.73	2.69	2.76	2.77
10.	Reading in chorus: far too little (1) - far too much (5)	3.14	3.73	3.37	3.45	3.53	3.41	3.25	3.43	3.44
11B	Pattern drills/explanations: far too few (1) - far too many (5)	2.69	3.25	3.47	3.20	2.83	2.73	2.87	2.80	2.99
17.	Follow up: no work done (1) - a lot of work done (5)	2.07	1.74	1.95	1.89	2.21	1.45	1.38	1.76	1.82
18.	I am studying English: only because I have to (1) - only for pleasure (2)	1.80	1.86	1.83	1.84	1.79	1.90	1.73	1.82	1.83
19.	Attitude toward languages: I don't like studying languages at all (1) - I very much enjoy studying languages (5)	3.71	3.42	3.39	3.48	3.45	3.59	3.13	3.42	3.45
20.	The course is over: What at pity! (1), Thank goodness! (2)	1.33	1.58	1.46	1.47	1.24	1.05	1.07	1.12	1.26

Table 4.37 The Attitude Test. Distribution of Answers (Percentages)

ITEM NO.	IM (N = 57)								EX (N = 68)								ENTIRE SAMPLE (N = 125)							
	1	2	3	4	5	0	x̄	s	1	2	3	4	5	0	x̄	s	1	2	3	4	5	0	x̄	s
1.	2	4	33	46	12	4	3.65	0.82			3	51	40	6	4.39	0.55	1	2	17	49	27	5	4.05	0.78
2.		14	33	40	9	4	3.45	0.86		1	19	49	25	6	4.03	0.73		7	26	45	18	5	3.76	0.84
4	9	9	14	39	26	4	3.67	1.23		4	12	24	54	6	4.36	0.88	4	6	13	30	42	5	4.04	1.11
7.	9	-	56	-	32	4	3.47	1.21		-	50	-	44	6	3.94	1.01	4	-	53	-	38	5	3.72	1.13
11A	9	40	39	7	2	4	2.51	0.84		15	51	22	6	6	3.20	0.78	4	26	46	15	4	5	2.88	0.88
12.	5	14	32	28	18	4	3.40	1.12		3	44	25	22	6	3.70	0.87	2	8	38	26	20	5	3.56	1.00
13.	9	54	19	11	4	4	2.44	0.94	3	15	53	21	3	6	3.06	0.79	6	33	38	16	3	5	2.77	0.92
3.		2	49	44	4	2	3.50	0.60		3	66	24	7		3.35	0.66		2	58	33	6	1	3.42	0.64
5.	5	5	16	37	37		3.95	1.11			3	28	69		4.66	0.54	2	2	9	32	54		4.34	0.92
6.		7	21	39	32	2	3.96	0.91		10	59	10	13	7	3.29	0.85		9	42	23	22	5	3.61	0.94
8A	2	4	67	23	5		3.26	0.70	1	1	60	35	1		3.34	0.61	2	2	63	30	3		3.30	0.65
8B	2		11	79	5	4	3.89	0.57		1	7	56	21	15	4.12	0.62	1	1	9	66	14	10	4.01	0.60
9A		2	65	32		2	3.30	0.50		6	71	18	4	1	3.21	0.62		4	68	24	2	2	3.25	0.57
9B		33	53	12		2	2.79	0.65	1	29	54	4	3	7	2.76	0.71	1	31	54	8	2	5	2.77	0.68
10		2	60	25	11	4	3.45	0.72	3	6	49	31	12		3.43	0.89	2	4	54	28	11	2	3.44	0.81
11B	2	9	61	21	5	2	3.20	0.75		19	69	1		10	2.80	0.44	1	14	66	10	2	6	2.99	0.64
17	53	18	16	11	2	2	1.89	1.14	57	13	19	7		3	1.76	1.02	55	15	18	9	1	2	1.82	1.08
18	16	70	2	-	-	12	1.84	0.42	18	69	1	-	-	12	1.82	0.43	17	70	2	-	-	12	1.83	0.43
19		4	44	51	-	2	3.48	0.57		9	38	50	-	3	3.42	0.66		6	41	50	-	2	3.45	0.62
20	32	28	-	-	-	40	1.47	0.51	66	9	-	-	-	25	1.12	0.33	50	18	-	-	-	32	1.26	0.44

CHAPTER 5

SUMMARY AND DISCUSSION

5.1 Summary of the Results

In this study the effectiveness of two different methods of teaching English grammar to adults was investigated. Six classes of adult students were selected for the experiment. Three of the classes were assigned to the method called IM (for "implicit" grammar), and the remaining three to the method called EX (for "explicit" grammar). All subjects were given a number of tests to measure their general proficiency in the language. A specialized pre-test, consisting of three sub-tests, was also administered in order to assess initial knowledge of the grammatical problems to be taught. A test of general verbal aptitude was given after the experiment. The tests showed that prior to the experiment there were no significant differences between classes assigned to IM and EX respectively. After the lesson series a post-test was given, which was identical with the specialized pre-test. A test measuring oral proficiency was also administered. For practical reasons it could be given as a post-test only. An attitude test with questions on both the details of the lessons and lesson materials and on the methods in general was administered immediately after the last experimental lesson. At the end of the regular term course the students were tested on matter dealt with outside the experiment (Term Test).

The principal measure of treatment effects was the individual gain score on the achievement tests, i.e. the difference in raw scores between the pre-test and the post-test. By means of a series of analyses of covariance adjusted post-test and progress means for the two groups were also calculated, taking into account differences in aptitude and proficiency.

An investigation of interaction effects between age, proficiency, and aptitude levels and teaching method was undertaken. The two experimental groups were each divided into three age groups, three proficiency groups, and three aptitude groups, whereupon a series of analyses of variance were performed, using progress and post-test results as dependent variables.

Intercorrelations between all the variables in the experiment were calculated, both for the two treatment groups separately and for the entire experimental sample.

The main finding of the experiment was that the EX treatment resulted in significantly better learning than the IM treatment. The mean progress scores for the three IM classes were 12.00, 15.38, and 11.84 respectively, and for the three EX classes 25.00, 23.41, and 24.75. The mean for the entire IM group was 13.37 (s = 10.12) and for the EX group 24.43 (s = 13.67). When adjustments were made for initial differences between the subjects, the progress mean for the IM group became 11.97 and for the EX group 24.94. The difference is statistically significant at the .01 level. The general pattern of results was very regular, both with regard to the performance of the individual class units, and with regard to the scores for the two treatments on the individual tests.

The mean score for the IM group on the oral test was 32.67 and for the EX group 36.14. An analysis of covariance with a weighted sum of the proficiency test results as the covariate gave an adjusted mean of 32.65 for the IM group and 36.74 for the EX group. This difference is significant ($p < .01$).

The subjects were also given two tests on the regular course, i.e. on matters in which the groups had been given as far as possible identical treatment. The scores for the two experimental samples were almost equal. The total mean score for the IM group was 54.85 and for the EX group 53.90.

There were no interaction effects such that the relative effectiveness of the two methods varied with category of learners. The EX method proved uniformly superior at all age, proficiency, and aptitude levels.

There were no significant differences between the lower, middle, and upper age groups with respect to increase in learning during the experiment. The subjects over 40 learnt almost as much as the subjects under 26. As there was also a slight correlation between age and verbal aptitude ($\underline{r} = .26$) there is the possibility that the upper age group represented a population with better potentials for language learning.

Female subjects tended to achieve better results than male subjects in both treatment groups. EX subjects did significantly better than IM subjects irrespective of sex. The mean progress scores for males in the IM group was 12.79 and for males in the EX group 21.38; for females in the IM group the mean progress score was 13.93 and for females in the EX group 25.16.

The average absence rate in the IM group was .8 lessons per individual and in the EX group .5 lessons per individual.

The EX subjects were more positive toward their teaching method than the IM subjects. The differences in attitude toward instructional materials and other details of the lessons were very small. The groups were equally motivated for studying languages.

There were high correlations between the various tests, indicating that they had high validity. The reliability coefficients were usually between .80 and .90. In general age correlated negatively with results on the various achievement tests, particularly the tests which involved auditory discrimination and oral production. There was no interpretable correlation between age and progress scores.

5.2 Sources of Error

Before going into further discussions of the above findings we shall have to consider whether the differences in learning effect may have been due to variables other than method. We shall discuss possible sources of error in the experimental groups, in the treatments themselves, and in the measurement instruments; finally we shall discuss errors assignable to other factors.

5.2.1 The Experimental Groups

In an experiment like the present one with a rather small number of subjects in the treatment groups and in which, furthermore, comparability between the groups has not been ensured through matching of the sampling units or some such procedure, there is always the risk that the groups deviate from each other in several important respects. Even though such inequalities can be readily levelled out by statistical methods, there is still the risk that important background variables may be overlooked by the experimenter.

All background variables that could conceivably be of significance for the outcome of the experiment have been checked (age, distribution by sex, general proficiency in the language, previous knowledge of the subject matter, total work-load including number of other subjects studied, verbal aptitude). It was found that the treatment groups were comparable in all respects except age and proportion of male and female subjects. The differences were mainly due to the fact that two classes deviating from each other and from the rest of the classes had been assigned to different treatments. As was shown in the preceding chapter the difference in learning effect between the treatments remains the same when the above variables have been neutralized.

Since we have no data on the subjects´ initial motivation and attitudes one may argue that the EX group may have started out with better motivation or may have had a more favorable attitude to the subject than the IM group. This, however, seems unlikely. Had this been the case, the differences would have remained, and probably increased, during the term, and would have been reflected in the attitude test administered after the experiment. As we know, there were no such attitudinal differences between the two groups at the end of the experiment.

It may also be argued that the subjects, the majority being over 25, had been previously taught by methods that were more in line with the EX treatment than the IM treatment, and that therefore they were biassed toward the EX program. However, the ways lessons were given during the experiment--wholly by tape recorder, with no active involvement of the live teacher--must have been equally new to them. Besides, toward the end of the experiment the IM lessons cannot have been unfamiliar to the students any longer. Still, the differences in achievement increased rather than decreased on structures that were taught in the second half of the experimental course. All subjects had also been deliberately trained with structure drills and chorus reading--prominent elements in the IM treatment--in the regular teaching preceding the experiment.

We assume, therefore, that the main results cannot be attributed to differences in background variables between the treatment groups.

5.2.2 The Experimental Treatments

The differences in learning effect may also have been due to differences between the two treatments not necessarily reflecting methodological characteristics. In our case one may suspect that the IM program was inferior to the EX program with respect to content, design, pedagogical devices, etc.

The two treatments have been described and compared in detail in previous sections; sample lessons are available in the Appendix. In sum we wish to emphasize that the two treatments were essentially the same in content; instructional materials and aids were of the same design and quality; time was carefully kept constant; observers of parallel lessons did not get the impression that one type of lesson was superior to the other in any respect.

We wish to conclude, therefore, that all differences in the presentation and practice of the grammatical structures under study were due to, and necessitated by, the fundamental differences between the two theories underlying the experimental methods.

Whether the IM or the EX method lost the most on being taped cannot easily be ascertained, and it is of course difficult to find compelling evidence either way. A good case can certainly be made for the argument that the success of pattern drills is largely dependent on the live teacher, whose role is sometimes compared to that of the conductor of an orchestra. It is the teacher who sets a suitable pace for such practice, and it is through his personal involvement that drills can be made into stimulating, enjoyable, and probably successful exercises. On the other hand, explanations may suffer from being put on tape in just as large, if not larger, degree, since it is only the live teacher in person who can judge whether his explanations have been understood, and whether he can proceed to the next phase, or whether more explanations need be added. Obviously, the efficacy of any lesson, whatever method it embodies, is seriously reduced if a tape recorder is substituted for the live teacher. However, any attempt at assessing the decrease in efficiency is bound to be subjective and speculative. Finally, it should be kept in mind that tape recorders and language laboratories are extensively utilized precisely for pattern practice. After all, as Hayes says, these facilities are intended to "relieve the teacher of some of the drudgery of repetitive drill and to furnish authentic models for imitation and practice" (quoted in Jakobovits, 1970, p.41).

It might perhaps also be argued that because the lessons were taped they were too far removed from the realities of the ordinary classroom and too inferior to lessons with a live teacher to permit us to draw conclusions at all from the experiment. There is no objective evidence which can convincingly refute such criticism, but the following more or less subjective counter-arguments seem to carry some weight. Neutral observers and school administrators have testified that both programs functioned very well. There was a sizable increase in learning, which, in our opinion, would compare well with achievement made in a regular classroom situation with the same number of lessons. The subjects, ordinarily extremely anxious that the teacher should make the most of lesson time, were generally quite positive toward the experimental lessons. This is probably due to the fact that the lessons were meticulously planned and prepared.

5.2.3 The Measurement Instruments

In order to avoid favoring one method by using a one-sided testing program, the achievement test battery had been devised so as to comprise both recognition and production tests, and within these both oral and written subtests. Thus, we believe, student achievement was measured in as varied a way as can reasonably be required of an experiment of this kind.

It is, of course, possible that the IM group profited from its treatment in some respects that we have not measured. In view of the predominance of audiolingual activity one might expect the IM group to have improved their pronunciation and fluency more than the EX group. Since the aim of the experiment was to teach grammatical competence, achievement in pronunciation and fluency, however important, was outside the scope of the investigation.

5.2.4 Other Factors

Even if we assume that the two experimental groups were equal in all important respects, that there were no differences between the programs except those determined by method, and that the criterion tests were not unfair to either group, there may still be certain other variables that can have contributed to the unequal effects of the treatments. One suspicion that may arise is that the lessons were administered under different conditions. However, the investigators went to great lengths to ensure that such details as classrooms, technical equipment utilized, and other such variables should be as similar as possible.

As the investigators acted only as technical assistants during the taped experimental lessons, their personalities can hardly have contributed to differences in either learning effect or attitude. Since the investigators also taught the regular course--the constructor of the IM program in the EX classes and vice versa--it can still be argued that they may have influenced the groups in different ways. However, the results of the Term Test do not support any such hypothesis. The scores were almost the same for the two groups. Careful attempts had been made at providing as neutral and equal teaching as possible in the lessons which were outside the experiment.[1]

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[1] In the replication of the experiment the investigators did not partake at all in the administration of lessons. The results were essentially the same as in the main experiment.

One more argument is worth thorough consideration. Since it is often emphasized that attitude and motivation are important factors influencing learning, the fact that the EX students did in fact show a significantly more favorable attitude toward their treatment than the IM students cannot be disregarded. An implication of this would be that the differences in learning were due to attitudinal divergencies. However, as has been shown before, the differences in attitude can chiefly be related to such features as are characteristic of the two methods. It was apparent that the students were negative mostly toward drills and reading in chorus, while they favored explanations and written exercises. Since drills and oral activities of similar kinds are just as inextricably associated with the IM method as are explanations and written exercises with the EX method, the overall attitude toward the lessons was a natural consequence. This means that--with adult students of this kind--a teaching method of the implicit type is likely to generate a less positive attitude than one of a cognitive type, and if there is an interaction between attitude and achievement, an implicit method is bound to lose to an explicit one. However, in view of the fact that there is only slight correlation between attitude and post-test and progress scores within each program, we would surmise that the difference in attitude cannot have been a very decisive factor. Further it should be pointed out that although the IM subjects had a less favorable attitude toward their treatment than the EX students, they were in no way negative. Since most items yielded means around 3 in the IM group, their attitude could be characterized as neutral rather than negative.

Another difference between the two treatment groups which might reflect attitude was the difference in absence rate. As we know, not only was the number of drop-outs (i.e. subjects who had attended less than eight lessons) larger in the IM group than in the EX group (11 vs. 2), the absence rate of those who were included in the final sample was also higher in the IM treatment group than in the EX group. As we saw in Chapter 4, the difference in learning effect cannot be accounted for by the absence rate. However, it seems likely that there is a connection between attendance and attitude, the more so as there is a slight, though interpretable, negative correlation between attitude and absence in the IM group.

In sum, we can see no indications that the results of the experiment are due to other variables than method. Our further discussion, therefore, will be based on the assumption that the differences in achievement between the two experimental groups reflect true differences in the effectiveness of the two methods tested.

5:3 Conclusions and Implications

In our experiment the implicit treatment resulted in an average progress which amounted to 26.6 % of the pre-test scores, i.e. 19.4 % of the possible progress. Such an improvement can by no means be considered negligible, especially if we take into account the fact that the treatment was subject to several experimental limitations: there were not more than ten 40-minute lessons, the stimulating effect of the live teacher was lacking, and the teaching was offered under rigid experimental restrictions, allowing no home-work or any other kind of follow-up work.

We can therefore conclude that adult learners such as those represented by our sample do profit from a purely habit-forming method in the learning of foreign language grammar. The achievement made by the implicit group supports the basic assumption of the audio-lingual habit theory, according to which it is possible for the language learner to internalize the grammar of a foreign language through intensive habit-forming practise, primarily oral pattern drill.

It can also be assumed that the effectiveness of our implicit method can be increased if it is used by the live teacher in an ordinary classroom situation, free from experimental constraints. The effectiveness of instructional techniques similar to those incorporated in our implicit lessons seems well worth empirical assessment, the more so as, under certain circumstances, such techniques are not only justified but necessary, for instance in multi-national groups of learners or in courses where there is no common language for communication between the instructor and the students.

It would be worth investigating whether the students' achievement is mainly due to conscious or unconscious processes. In other words, one should find out whether learning by the implicit method results from an "intelligent" inductive process in which the student arrives at certain generalizations with the help of the carefully structured instructional material, or whether it is due to a subconscious process in which language habits are developed by analogy.

However, the achievement of the implicit treatment group, sizable as it may appear in isolation, becomes rather insignificant when compared to the impressive progress made by the explicit group. The large difference appears if we take a look at the progress measures corresponding to those given for the implicit group above: we find that the explicit group increased its pre-test scores by 48.5 %, thereby achieving 33.3 % of the possible increase.

On the basis of the significant difference in learning effect between the implicit and the explicit method we can conclude that, when the aim is to teach adults grammatical structures which differ from those of the mother tongue, the cognitive code-learning theory provides a better basis for instructional strategies than the audio-lingual habit theory.

With reference to the results of our Attitude Test presented before we also conclude that a teaching strategy determined by the cognitive code-learning theory generates a more favorable attitude with adult students than does a method relying on audio-lingual habit principles.

These conclusions have considerable support from experienced teachers and theoreticians. We have previously referred to a questionnaire which revealed that language teachers with experience from adult education assign an important role to the reasoning ability of mature students and therefore advocate analytical approaches. (See De gymnasiala ..., 1970, pp.150-153). Similar views have been expressed by a large number of linguists both on theoretical and empirical grounds. Palmer (1968), a firm believer in the efficiency of habit-forming practices, wrote half a century ago: "Be it as it may, the adult requires explanations of some sort or other, and we must recognize that he has a right to them and that the withholding of them will retard his progress by many months" (p.168). Lado (1964), whose name is often associated with audiolingualism, states that "Adults learn more effectively by systems and by systematic cataloguing than do children" (p.57). According to Rivers (1968), known as an eclectic, "With adult students, who . . . have developed certain habits of organizing material they are studying, the audiolingual method is still appropriate if memorization and drilling are accompanied by some explanation of the place of structure being practiced in the system of the language as a whole" (p.48), while Ausubel (1964), a psychologist, takes a more rigorous position claiming that "certain features of the audio-lingual approach are psychologically incompatible with effective learning processes in adults" (p.420). It can, therefore, be presumed that our first conclusion will largely coincide with the expectations of linguists, teachers, and psychologists no matter what language learning theories or assumptions they embrace.

Our second conclusion, too, is likely to fall in line with what could generally be expected by representatives of the language teaching profession. "Adult students in general dislike forming new habits and avoid such work as far as possible; they seek to replace it by forms of study requiring discrimination and other processes of the intellect. One reason for this is that habit-forming often entails monotonous work whereas the other types of work are more or less interesting; another reason is that the forming of a habit seems a slow process; so many repetitions are required and progress is not at once apparent, whereas the other form of work has all the appearance of rapidity" (Palmer, 1964, p.55). The dominant habit-forming technique in our implicit lessons was the oral pattern drill. Since it was probably the least popular activity in our lessons, the less favorable attitude of the IM students can largely be attributed to the fact that they had to spend considerable time doing pattern drills. In view of the qualities of the drills employed in our lessons (cf. detailed description in Chapter 3) we venture to conclude that the Attitude Test reflects not only attitude toward those particular structure drills which the students were actually involved in but also toward the technique in general. It is not without reason that many linguists, who are not a priori opposed to the pattern drill technique, consider the danger that drill can become dull. According to Frey (1968) "it can easily lead to classroom monotony and thus negate much of its potential function" (p.353), and in Harding's words (1967) "the endless repetition of sentences illustrating a certain pattern or structure can become as soul-destroying as any grammar-grind" (p.77). Rivers (1968), too, speaks about the danger of keeping students at "useful but dull" drills for too long. "Such drilling becomes very boring and tedious to students, who may either seek escape in absent-minded vocal participation or grow to loathe the foreign-language lesson" (p.108).

Before further discussion of the results gained from our research, a word of warning against too far-reaching interpretations is in order. Our conclusions above must not be automatically extended to other areas of language learning or to the learning of grammar by adolescents and children. Neither must our results serve as a basis for prescribing or condemning any particular language teaching methodology. As has been repeatedly emphasized, the treatments tested in the experiment have been devised so as to represent two basically different language learning theories, and to fit a very special experimental design, and therefore they are not to be identified with any particular methods actually in use.

However, our research results have a number of implications which should not be ignored but which ought to encourage further experimental research.

One implication is that a method based entirely on habit-forming techniques like our implicit treatment is hardly justified in the teaching of grammar to adults, unless necessitated by special circumstances. It is true that the implicit method does produce learning, but compared with the explicit method, which certainly cannot be assumed to be an ideal method either, this learning is obviously moderate and slow. It must be remembered that adults are as a rule very anxious that the time they devote to their studies is used as efficiently as possible.

Even if there had been no differences between the two experimental treatments in terms of effectiveness, it seems reasonable to give priority to the explicit method because of the more favorable attitude it generated among the students. Although our experiment does not reveal any interpretable correlation between likes and dislikes of teaching methods and techniques on the one hand, and achievement on the other, it is very probable that the attitude of the students to the very treatment they are exposed to will, in the long run, influence their motivation and may even be decisive for their further participation in language courses.

Since the two experimental methods tested differ in more than one respect, our investigation provides information on the effectiveness of two complex strategies, not individual techniques. The only safe conclusion one can draw is that such techniques as grammatical explanations, deductive presentation of the subject matter, translation, the use of the native language, and contrastive analysis, are jointly superior to the combination of techniques constituting the implicit method in the teaching of foreign language grammar to adults. Even though it is theoretically possible that the difference in learning effect between the two methods was due to the particular efficiency--or inefficiency--of one technique or detail, it is more probable that the efficiency of each method reflects the cumulative effect of several or all features. A fair conjecture would be that they were all, in about equal measure, conducive to the increase in learning. Further research, aiming at assessing the effectiveness of at least some of the individual techniques employed in our experimental methods, will be needed to answer these more specific problems. For the moment, however, we have to accept the hypothesis of the cumulative effect of the teaching techniques constituting the experimental methods. The immediate implication of such a hypothesis is that techniques employed in the implicit lessons, and also characteristic of several methods relying on habit-forming principles, are less powerful than has been suggested by the advocates of such methods. Thus our results seem to justify the increasing criticism of methods that rely on behaviorist concepts, and we suggest that proponents of the audio-lingual habit theory have overrated the value of learning by induction, habit-formation, and aural-oral practice, at the same time as they have too glibly rejected deduction, explanations, and "puzzle-solving" exercises, including translation. In the following passages we shall attempt to present some support for this implication concerning the value of various teaching techniques, and to point the direction of future research.

The question whether induction or deduction is in general the better approach to language teaching can, of course, not be settled on the basis of the present investigation. However, there are indications that in the teaching of grammar to adults and adolescents, the elucidation of a problem structure (to use Lado´s term) before practice sets in, or at least at an early stage, is preferable to delayed generalizations or no rules at all. "Those who have seriously tried to teach grammar inductively will know how long it takes and how uncertain it can be. Yet, it is certainly possible to learn a language, and learn it well, without learning the formal rules of grammar. However, a certain amount of work on grammatical rules does in fact speed and simplify the language learning process," Harding states (1967, p.54). In Ausubel´s words (1964) "It takes a long time to discover grammatical rules autonomously and inductively; and until the correct discovery is made, practice is not transferable" (p.422). Without doubt, our findings support these statements. For further empirical evidence on this point we refer to our chapter on related research, primarily the conclusions (Section 2.4). What is needed in experimental research even more than comparative studies aiming at the evaluation of inductive and deductive approaches is, in our opinion, the assessment of the relative merits of such approaches at different age levels. Therefore, the logical follow-up of the experiment described here is a series of replications at other age levels.[1]

The effectiveness of the pattern drill technique has been questioned, even denied, by many, mainly because this technique is said to disregard the creative aspect of a language and the importance of meaningful contexts. Therefore, it is maintained, there is little transfer from mastering a structure drill to mastering free speech. According to Rivers (1964) "A student who has always had the right response put into his mouth by the structuring of the learning situation can give an impression of glib fluency which may prove quite spurious when he finds himself on his own" (p.72), or as Gefen (1967) puts it, "the learner may utter the pattern perfectly, substitute in exactly the right slot and yet not understand a word. . . . There will be no interference by the mother-tongue, but none by thought-process either! Graduates of the 'new school' will suffer from the same faults as do the traditionalists: knowing the patterns (where the traditionalists know the paradigms) but not knowing the language"

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[1] The first replication was carried out in the fall of 1971 and involved a younger adult population (average age was 22). Although the results very much conform to those of the first experiment, the differences in learning effect between the two methods tend to be less pronounced.

(p.192). Much the same thought is expressed by Belasco (1965), according to whom, despite the ease with which students perform in the area of manipulating drills, "not many . . . can understand and speak the language *outside the ordinary classroom situation*" (p.483). Apparently pattern drill develops what Spolsky (1966) calls "language-like behavior", which is not the same as "knowing the language". The latter "involves the ability to produce an indefinite number of utterances in response to an indefinite number of stimuli" (p.124), whereas the former is a much more limited ability, like that of a student using his "stock of sentences in answer to a finite set of questions" (Ibid.). Gefen (1967), referring to Spolsky´s article, points out that "much as Skinner´s pigeons were not really playing ping-pong, but only behaving *as though* they were," habitualized patterns are not language, but merely language-like behaviors (p.192). Our experiment confirms the views expressed in the quotations above: the IM subjects performed willingly and readily in the drills, yet when they were facing the same patterns in a new situation, in our experiment provided by the various parts of the post-test, the transfer proved to have been rather limited in comparison with the other experimental group. On these grounds it appears that drills have a deceptive face validity, and it may be questioned whether this technique has any justification in the teaching of grammar at all. However, there is good reason to believe that the various types of pattern drill can be a powerful technique if utilized in appropriate portions at the right time, place, and level. Inefficient as it appears when used for providing the student with insight into the structure of the target language through an inductive process, it may well prove an efficient medium in establishing automatized use of language patterns once they have been internalized by the student as a result of cognitive processes. However, automatized speech, or "mastery of the language is a *terminal not an immediate* objective" we may say with Belasco (1965, p.483), and it is tempting to agree with Jakobovits (1970) that "the automatization of speaking and understanding can come only *after* knowledge of the structure has been acquired" (p.25).

The assumption that the transfer from audio-lingual skills to reading and writing skills is greater than the reverse (cf. Hayes, 1964, in Jakobovits, 1970, p.41) is not supported by our findings. On the contrary, as has been demonstrated before, the subjects trained by the explicit method were also superior in the various oral tests. According to Saporta (1966) the evidence of the assumption to the effect that speaking facilitates writing more than the reverse "seems to be largely anecdotal, coming from generalizations of language students who found little transferability from writing to speech. The attempts to demonstrate the validity of such an assumption have been inconclusive" (pp.85-86). Ausubel (1964) advances two reasons for presenting written and spoken materials both alternatively and concomitantly: "First, in our culture, adolescents and adults are habituated to learning most new ideas and subject matter by reading rather than by listening. Thus a pure audio-lingual approach deprives the older learner of his principal learning tool and of the instructional medium in which he feels most comfortable and confident. This is particularly unfortunate during the early phases of instruction when learning stresses tend to be greatest.

Second, prior familiarization with and simultaneous exposure to the written form of the material can serve as helpful props in the early stages of acquiring oral comprehension skills" (p.423).

Even though we hesitate to make inferences as to the merits of the various procedures characteristic of the EX lessons, we can find support in the professional literature for such practices (see Chapter 2). Many researchers have found that the native language, used with discrimination, has a beneficial effect on learning, especially when it is used to convey meaning and clarify grammatical problems. Grammatical explanations have often been found to pay off, although they do not in themselves give language training. The EX program relied heavily on such explanations. The deductive approach, i.e. presentation of rules before the learners have been given training with the structure under study, has often given better returns than the inductive approach, i.e. presentation of rules after the learners have practised the structure.[1] The deductive approach was adopted in the EX program.

On the basis of results from our own investigation and research elsewhere we infer that deductive explanation of grammar, translation, mother-tongue references, etc., should not be rejected on *a priori* grounds. Even though evidence as to their merits may seem unconvincing or inconsistent with modern developments in language teaching, there is every reason to assess them with an open mind and with no regard to popular assumptions, at least as long as we are dealing with adult learners.

In order to achieve the primary objectives of our research (cf. Section 1.3) we were compelled to operate with two experimental methods that were pushed toward extremes. In the field of language teaching, however, such pure methods are hardly justified, and it can be assumed that teachers who limit their strategies exclusively to habit-forming techniques are just as rare as those who entirely reject such practices. However limited our knowledge of language and the language learning process, it seems safe to agree with Gefen (1967) that "language is neither a Pavlovian reflex nor a Skinnerian reinforcement-eliciting response--or rather it is all these plus a lot more" (p.192), and with Belyayev according to whom "When using language, a person always creates his speech anew, making active use of both habits and knowledge" (p.77). Since both habit formation and cognition apparently play important roles in the language learning process, language teaching methods ought to facilitate both habit-forming and cognitive processes. Therefore there is no reason to consider the "audio-lingual habit theory" and the "cognitive code-learning theory' as mutually exclusive of each other. In fact, as Carroll himself states in a recent paper (1971), he "had no real intention of pitting one against the other" but "was only interested in pursuing what each theory would imply if pushed to the limit." "Each of these theories--he proceeds--is to some extent wrong or incomplete. Yet each theory has elements of truth and value. In saying this I am not simply being 'eclectic.' Instead, I am trying to suggest a meaningful synthesis" (Ibid.). Carroll even suggests a term for such a synthesized theory, "the cognitive habit-formation theory", and says that although such a title may seem a contradiction, "the concepts of habit-formation can be accommodated to each other" (Ibid.).

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[1] A recently reported investigation by Jenkins (1970)--not included in Chapter 2--showed that classes receiving explanation before pattern drill achieved better scores than classes receiving explanation between and after the drill, and also better than those not receiving any explanation.

Our investigation should not be considered as an attempt at adding to the trend "for points of view to become crystallized and polarized" (Ibid.), but rather as a necessary first step in a series of experiments aiming at a viable synthesis outlined by Carroll and many others. But such a synthesis will hardly be arrived at by eclectically combining the various features of the different teaching methods hoping that this might lead us to an optimal blend. Rather, we are inclined to agree with Stern (1970) that what we need is "unprejudiced inquiries into the methods of language teaching and better insights into the processes of second language learning from the learner's point of view, as well as studies on the uses and abuses of the many techniques and technologies available to the language teacher today" (p.9).

In sum we wish to stress that the results of our experiment do not lead us to take a definite position in favor of teaching strategies that are shaped according to our explicit method. We are well aware that this method cannot be considered ideal for practical purposes in its present state. Further experimentation will have to be geared toward combining the features of our experimental treatments, which may lead us to a method yielding results superior to those of the IM and EX methods. Such a method may then be interpreted as a step toward a desired synthesis. Indications are that at the adult level it is the explicit method that has to set the character of such an "optimal" method, even if it will have to comprise some of the techniques characteristic of the implicit version.

Our results seem to suggest that age can be of less importance than method in the learning of a foreign language, at least within the age range represented by our subjects. There were no significant differences between old and young students with regard to progress between the pre-test to the post-test, whereas both the pre-test and post-test scores were much higher for the younger students.

The tests that differentiated the age groups most were those which involved oral stimuli or responses. Results on such tests consistently correlated negatively with age, a finding which has often been reported before. We are therefore inclined to think that success in language studies is not so much dependent on the age of the learner as on the kind of teaching he is exposed to, and that the major handicap the older learner is up against is that of impaired aural-oral faculties. Because of this it needs emphasizing that all kinds of oral-aural exercises with older learners must be conducted at an easy pace and with careful attention to acoustic conditons. The principle that the foreign language should be presented as it is really spoken, that is, as it is spoken by a native speaker in a natural situation, must of necessity be set aside in adult education, at least in the initial stages of training.

The adult learner often finds difficulties in imitating and forming the new sounds and utterances and he will often need a long time of laborious efforts before he can accurately reproduce what he has heard. Many fast pattern practice programs intended for adolescents are therefore quite unusable at the adult level.

All oral activities in the experimental lessons were carefully timed so as to suit adult learners. Experience from the pilot study enabled us to find the suitable pace.

It must of course be remembered that our subjects were all mature learners, the youngest being 17, i.e. they were all "old" as language learners. Therefore it would certainly be a rewarding task for future research to investigate whether our findings at the adult level are valid for lower age levels as well. Indeed, the relative effectiveness of the two basic strategies may actually prove to be reversed. We do not know what effects our methods would have with, say, 13-15-year-olds, an age level which has often been quoted as the critical period at which the learner´s capacity to acquire a language in the "natural" way has largely disappeared.

The study seems to warrant a more general conclusion of some consequence for further research, namely, that language learning experiments need not be reduced to strict manipulation with variables in artificial laboratory settings, nor be restricted to inconclusive survey studies of regular classroom instruction with poor control of the crucial teacher variable. Such shortcomings have often been assigned to research efforts in this field. It is entirely possible to conduct educational experiments with pre-recorded instruction as we have done here, provided that enough care is taken that the programs function in every detail as intended and that they are of professional quality. The advantages with this strategy are obvious: the experimenter can plan and time exactly the various elements to be included in the lessons, which means that he can keep an exact check on the treatments the subjects receive; he can make sure that parallel experimental groups do not get different treatments; finally he does not have to engage and train a large number of teachers and assistants.

The disadvantage of experiments with pre-recorded instruction is that they require minute planning and preparation of lessons, which is time-consuming and also very demanding on the experimenter. Usually a complete tapescript of the entire instructional program will be needed for the recording. A further requirement of prerecorded lessons is that they offer variation, so that student interest does not flag. Extensive use of audiovisual aids can make up for the absence of the live teacher. The production of first-rate instructional materials, both for use with over-head projectors in the form of illustrated transparencies and for individual use in the form of printed workbooks, is however an exacting task.

It has often been argued that comparative method studies have no great value, as teaching methods do not represent a crucial factor behind foreign language achievement. It is also often maintained that there is no one method that is best; methods have to be adapted to the various qualities of the students, the special objectives of the course, the relationship between the native and the target language, and many other circumstances. However, teaching methods and motivation are about the only factors influencing achievement that can be controlled. Other factors determining success in studies, such as the students´ aptitude and the teachers´ personal qualities may be measured, but hardly improved. The number of classroom hours, the size of the class units, the quality of equipment, and similar conditions, important as they may be, are matters of finance and educational policy, and can, therefore not be influenced by the language teacher and researcher. The dimensions of the methodological training of prospective teachers and retraining of qualified teachers suggest the importance attributed to the issue. Were teaching methods not regarded as a most potent tool in the hand of the language teacher, the vast funds invested in methodological training would hardly be justified.

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APPENDIX 1

Instructional Materials

Sample Lessons

Each of the two sample lessons, Lesson 9 IM version and Lesson 9 EX version, consists of a tapescript, a copy of the workbook, and a set of copies of the transparencies.

In the tapescripts of both lessons three short lines (- - -) indicate a brief pause, and slanted lines (/////) indicate a pause for the students to repeat or respond.

For administrative purposes the covers of the workbooks were printed blue for the IM program and red for the EX program.

The IM Version. The tapescript contains the entire lesson text plus, in parentheses, information about some classroom activities, and--at the end of each major section of the lesson--the time elapsed from the start.

The Dialogue and the written exercises (2, 6, and 7) may be found in the workbook.

The set of transparencies includes the pictorial aids to the oral structure drills (1, 3, 4, and 5), the keys to the written exercises, and a songtext.

The EX Version. The tapescript gives the directions to the teacher operating the tape recorder and overhead projector, the text of the taped lesson, and the time elapsed from the start of the lesson.
For the benefit of non-Swedish speakers a few phrases will be translated:

ram	'frame', 'set'
lägg på (verb)	'project', 'superimpose'
Ö (short for överlägg)	'superimposed transparency'
ta bort	'remove'
rättningsmall	'key'

In the lesson several individual transparencies were successively superimposed on each other to form each of the four full sets here reproduced. The procedures can be reconstructed with the help of the tapescript.

Tapescript - Lesson 9 (IM)

Text, Instructions, Comments	Time
Music: Good Morning Starshine (from 'Hair')	2'00"

ROY: Let´s begin today´s lesson with a short oral exercise, Exercise 1. - - - You can see some pictures with this exercise. Look at them and listen to the examples. Valerie, is this the President´s plane?

VAL: No, it can´t be his plane.

ROY: Couldn´t you give a shorter answer, Valerie?

VAL: Yes, I could. Instead of: No, it can´t be his plane, I could simply say: No, it can´t be his.

ROY: Right. Well, as you see, there are two possible answers. Valerie is going to give the longer answer to my questions, and I want you to give the short answer.
Example: Is this the President´s plane?

VAL: No, it can´t be his plane.

ROY: And you say:

VAL: No, it can´t be his.

ROY: Example: Is this my money?

VAL: No, it can´t be your money.

ROY: And you say:

VAL: No, it can´t be yours.

ROY: All right then, let´s begin.

ROY: Number 1. Is this the President´s plane?

VAL: No, it can´t be his plane. /////
No, it can´t be his.

ROY: Number 2. Is this my money?

VAL: No, it can´t be your money. /////
No, it can´t be yours.

ROY: Number 3. Is this the Queen´s horse?

VAL: No, it can´t be her horse. /////

No, it can´t be hers.
ROY: Number 4. Is this your car?
VAL: No, it can´t be my car. /////
No, it can´t be mine.
ROY: Number 5. Is this the teacher´s house?
VAL: No, it can´t be his house. /////
No, it can´t be his.
ROY: Number 6. Is this your train?
VAL: No, it can´t be my train. /////
No, it can´t be mine.
ROY: Number 7. Is this my cake?
VAL: No, it can´t be your cake. /////
No, it can´t be yours.
ROY: Number 8. Is this the Rockefellers´ house?
VAL: No, it can´t be their house. /////
No, it can´t be theirs.

5'25"

ROY: Thank you listeners. And now let´s do some written work. Open your workbooks at page 1. - - - Exercise 2. Read the instructions. When you hear the music, correct the exercise. Start working now.

(Pause. Soft music indicates the end of the pause. The key to the exercise is projected on the screen. The students correct their mistakes.)

8'35"

VAL: And now listeners, it´s time to read a new Dialogue. This time it is a conversation between a Swedish girl, Monika, and an English boy, Jack. They are talking about games.
As usual, Roy and I are going to read the dialogue for you. Don´t look at the text, please. Just listen.

(Reading of the dialogue.)

VAL: Open your books at page 2, please. - - - Listen and follow the dialogue.

(Reading of the dialogue.)

VAL: Well, listeners, I hope you understand most of the dialogue. You have probably learnt something about English games. But some of the words in the conversation must be new to you, so let´s have a look at them. As usual they are underlined in your workbooks. Would you please say them after Roy.

(Reading of words and expressions with pauses for the students to repeat in chorus.)

VAL: Right! Now let´s read the dialogue once again. This time you read it after us, all of you. I hope this time you´ll understand everything Jack says about soccer and cricket. Let´s start, shall we?

(Reading of the dialogue with pauses for the students to repeat in chorus.)

16'35"

VAL: Thank you, listeners. Close your workbooks, please. - - -
And now we have some pictures to show you. Exercise 3. - - - On the screen you can see six different games which I hope you recognize. To make sure, we have written the names of the games under the pictures. Look at picture number one. We call this game soccer. Or, if you like you can say:

ROY: This game is called soccer.

VAL: Look at number two. We call this game tennis.

ROY: This game is called tennis.

VAL: Now, listeners, it´s your turn. Change my sentences in the same way as Roy did, all right?

VAL: Number 1. We call this game soccer. /////

ROY: This game is called soccer.

VAL: Number 2. We call this game tennis. /////

ROY: This game is called tennis.

VAL: Number 3. We call this game Rugby. /////

ROY: This game is called Rugby.

VAL: Number 4. We call this game golf. /////

ROY: This game is called golf.

VAL: Number 5. We call this game cricket. /////
ROY: This game is called cricket.
VAL: Number 6. We call this game ice-hockey. /////
ROY: This game is called ice-hockey.

VAL: Now, let's see what these games are played with. Exercise 4. - - - Listen to the examples, please. Roy, what's soccer played with?
ROY: Soccer is played with a round ball.
VAL: What's tennis played with?
ROY: Tennis is played with rackets.
VAL: Now you do it, everyone.

VAL: What's soccer played with? /////
ROY: Soccer is played with a round ball.
VAL: What's tennis played with? /////
ROY: Tennis is played with rackets.
VAL: What's Rugby played with? /////
ROY: Rugby is played with an oval ball.
VAL: What's golf played with? /////
ROY: Golf is played with clubs.
VAL: What's cricket played with? /////
ROY: Cricket is played with a bat.
VAL: What's ice-hockey played with? /////
ROY: Ice-hockey is played with a puck.

VAL: In the next exercise, Exercise 5, we'll find out who these games are played by. Listen to the examples:
Roy, is soccer played by men or women?
ROY: Well, it's played by men. But who knows? Probably by women, too.
VAL: Yes, that's possible. Now I'll ask you an easier question.
Is tennis played by men or women?
ROY: Tennis is played by men and women.
VAL: Now listeners, look at the pictures and answer.

VAL: Is soccer played by men or women? /////

ROY: Soccer is played by men.

VAL: Is tennis played by men or women? /////

ROY: Tennis is played by men and women.

VAL: Is Rugby played by English students or by Swedish students? /////

ROY: Rugby is played by English students.

VAL: Is golf played by men or women? /////

ROY: Golf is played by men and women.

VAL: Is cricket played by Americans or by Englishmen? /////

ROY: Cricket is played by Englishmen.

VAL: Is ice-hockey played by English boys or by Swedish boys? /////

ROY: Ice-hockey is played by Swedish boys.

VAL: Right. Well, I think you know almost everything about these games, and what is more important, you know how to say it in English. Before we go on, let´s listen to some music and relax for a few minutes.

22'45"

Music: When I´m 64 (The Beatles)
(The text of the song is projected on the screen.)

25'10"

VAL: Open your workbooks at page 3, please. - - - Exercise 6. In this exercise you´ll tell us what different things are made of. You probably remember that Jack says in the dialogue: A cricket ball is made of leather. You probably did not know that. As you can see, we have written down the words you can use in the exercise. These words are: Leather, wood, metal, etc.
(Pause. Soft music and key.)

VAL: All right. Have you finished? And now another exercise, page 4 - - - page 4, Exercise 7. This is a little more difficult.

You must change sentence A into sentence B.
We´ll read the examples for you. Listen:
(Reading of examples.)
Well, sentence A means the same as sentence
B, but is expressed in a different way.
Try to change the other sentences. Off you go!
(Pause. Soft music and key.)
I hope you´ve finished now, because Roy and I
would like to read the exercise for you.
Follow in your books, please.
(Reading of Exercises.)

34'15"

VAL: And now let´s do one more oral exercise.
This time there´ll be no pictures, so you
must listen very carefully to the questions
and then answer them.
Here are some examples:
Roy, is ice-hockey played in the summer
or in the winter?

ROY: Ice-hockey is played in the winter.

VAL: Is golf played with a big ball or with a
small ball?

ROY: Golf is played with a small ball.

VAL: Now it´s your turn.

VAL: Is ice-hockey played in the summer or in
the winter? /////

ROY: Ice-hockey is played in the winter.

VAL: Is golf played with a big ball or with a
small ball? /////

ROY: Golf is played with a small ball.

VAL: Are tennis balls made of leather or rubber? /////

ROY: Tennis balls are made of rubber.

VAL: Is cricket played in England or in
Sweden? /////

ROY: Cricket is played in England.

VAL: Is baseball played in Sweden or in America? /////

ROY: Baseball is played in America.

VAL: Is polo played by rich people or by poor
people? /////

ROY: Polo is played by rich people.

VAL: Is basket ball played with an oval ball or with a round ball? /////

ROY: Basket ball is played with a round ball.

VAL: Is a football match watched by boys or girls? /////

ROY: A football match is watched by boys.

VAL: Well, mostly by boys. Let´s finish today´s lesson with our Dialogue. You must be Monika, the Swedish girl. Roy will be Jack and he will answer all your questions about English games. Open your workbooks at page 2, please. - - - Are you ready? Then start reading the dialogue NOW.

(The students and the teacher read the exchanges of the dialogue alternately.)

38'55"

VAL: Well, listeners, I hope you have learnt something about games today and about the English language as well. That´s all for today. So would you return your workbooks to your teacher, please, while we play a record for you. Good bye.

Music: Tonight (from West Side Story)

41'40"

A:11

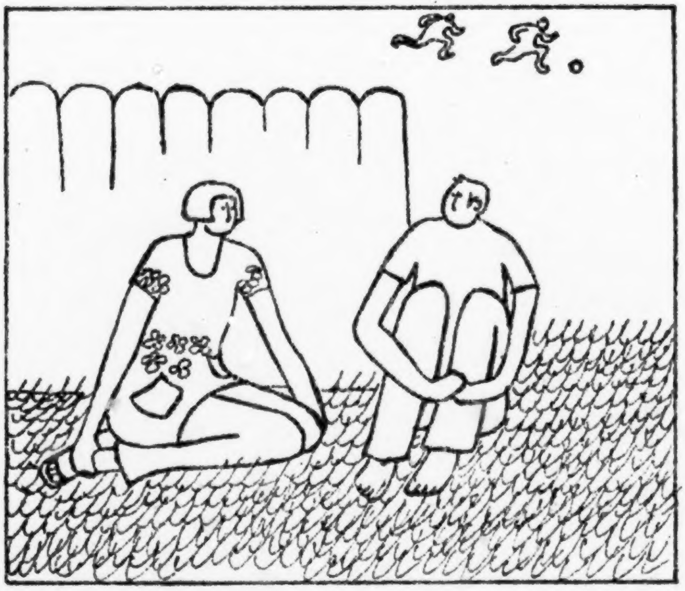
9

workbook

Projektet GUME/Vuxna

Specialkurs i engelska för vuxna

Games



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244

Exercise 2

Fyll i det rätta ordet i övningen här nedan enligt följande exempel.

EXAMPLE: John has got a new bicycle.
Whose bike is it?
It´s his.

Obs! Endast ett ord i varje lucka!

---

1. Frank Hunt has got a chemist´s shop.
Whose shop is it?
It´s _________.

2. My wife and I have got a summer house.
Whose summer house is it?
It´s _________.

3. Mrs Thomson has got a silver bracelet.
Whose bracelet is it?
It´s _________.

4. You have got English books.
Whose books are they?
They´re _________.

5. My children have got a sailing boat.
Whose boat is it?
It´s _________.

6. I´ve got a lot of stamps.
Whose stamps are they?
They´re _________.

✱ Dialogue

Games

MONIKA: Tell me something about games in England.

spel, sport

JACK: Well, cricket and soccer are popular games.

fotboll

MONIKA: Soccer? What's that?

JACK: Oh, I suppose you call it football in Sweden. In England it's often called soccer.

jag antar

MONIKA: Why is it called soccer?

JACK: In England we play two types of football, you see. One of them is association football, or soccer for short and the other is rugby football.

(vanlig) fotboll

förkortat

MONIKA: Oh, I remember now. It's played with an oval ball, isn't it?

JACK: That's right.

MONIKA: Where is rugby played?

JACK: It's mostly played at schools and universities. And it's called 'rugger' by the students.

för det mesta

MONIKA: Tell me something about cricket.

JACK: Cricket is played with a bat and a small ball which is made of leather. It is played in the summer, and a good match is watched by many people.

slagträ

läder

MONIKA: Isn't football, I mean soccer, played in the summer?

JACK: No, in England it's played in the cold season.

Exercise 6

Komplettera meningarna härnedan. Välj därvid bland följande ord: *leather, wood, metal, rubber, glass, paper.*

WHAT ARE THESE THINGS MADE OF?

1. A cricket ball is made of ____________________.

2. Tennis balls are made ________________________.

3. A bat ______ made of ____________________.

4. Books ________ made of __________________.

5. Our desks ____________________________________.

6. A bottle ______________________________________.

7. A golf club ___________________________________.

Exercise 7

Ändra mening a) till mening b) enligt följande exempel.

EXAMPLE: a) Many people watch a good football match. →

b) *A good football match is watched by many people.*

1. a) Many Swedish boys play ice-hockey. →

b) *Ice-hockey is* ______ *by many Swedish boys.*

2. a) Thousands of Swedish people visit Italy every summer. →

b) *Italy is* ______ *by thousands of* ______
every summer.

3. a) Our teacher asks a lot of questions. →

b) *A lot of questions are* ______ *by* ______.

4. a) English students call this game 'rugger'. →

b) *This game* ______.

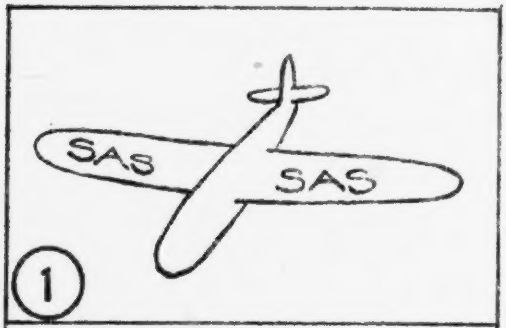
5. a) My secretary types all my letters. →

b) *All* ______.

1

Is this the President´s plane?

No, it can´t be his.



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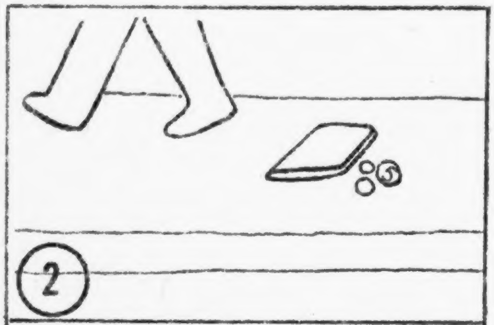
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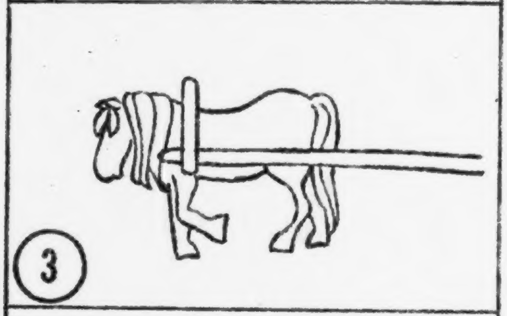
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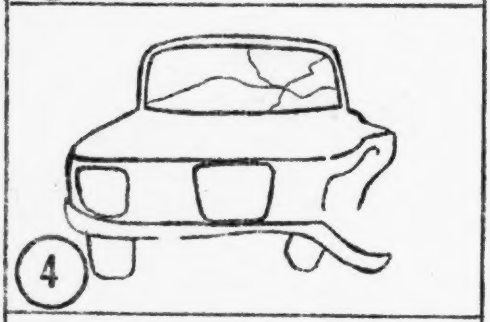
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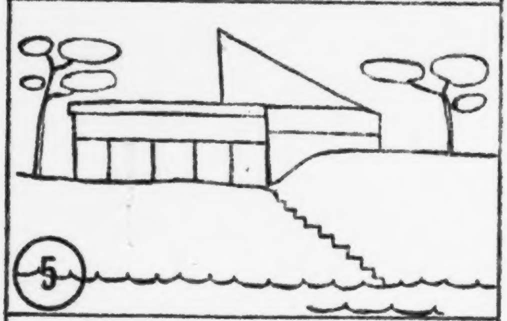
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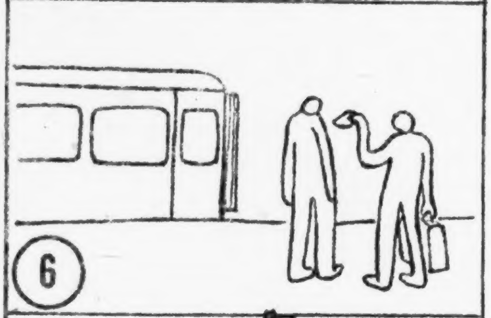
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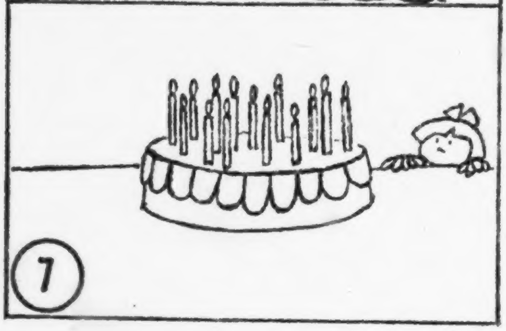
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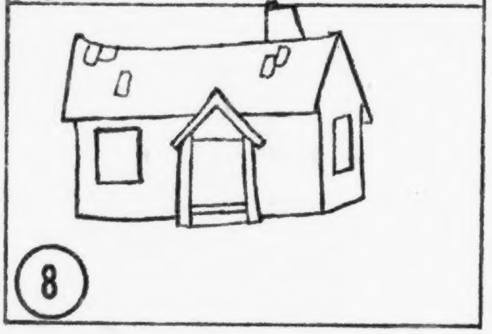
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Exercise 2

Fyll i det rätta ordet i övningen här nedan enligt följande exempel.

Rättningsmall

Obs! Endast ett ord i varje lucka!

---

1. Frank Hunt has got a chemist's shop.
Whose shop is it?
It's his .

2. My wife and I have got a summer house.
Whose summer house is it?
It's ours .

3. Mrs Thomson has got a silver bracelet.
Whose bracelet is it?
It's hers .

4. You have got English books.
Whose books are they?
They're yours .

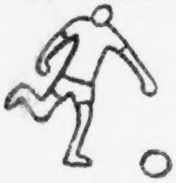
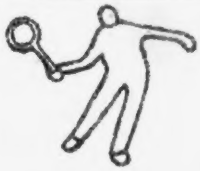
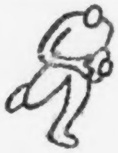
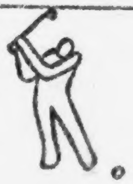
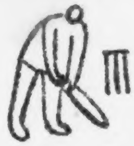
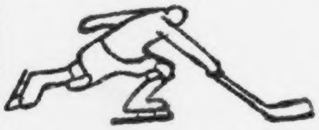
5. My children have got a sailing boat.
Whose boat is it?
It's theirs .

6. I've got a lot of stamps.
Whose stamps are they?
They're mine .

❀ 3

We call this game soccer. ⇨

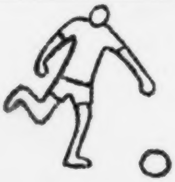
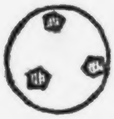
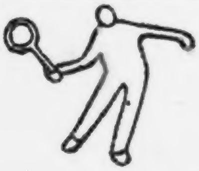
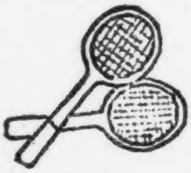
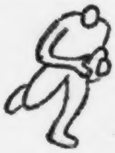
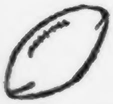
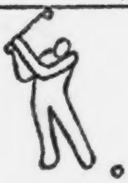
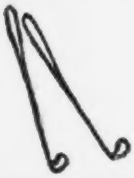
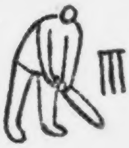
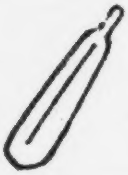
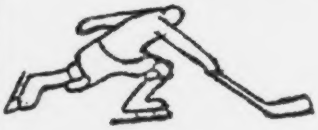
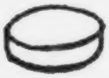
This game is called soccer.

①		soccer
②		tennis
③		rugby
④		golf
⑤		cricket
⑥		ice-hockey

❋ 4

What´s soccer played with?

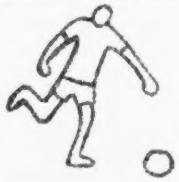
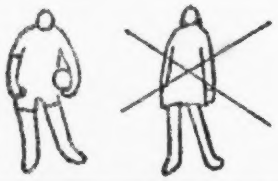
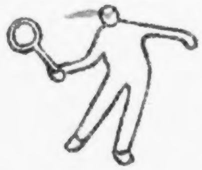
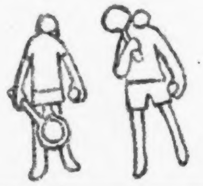
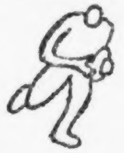
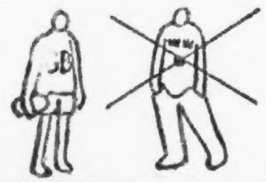
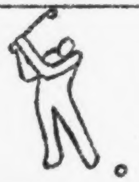
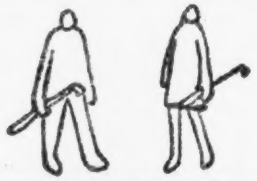
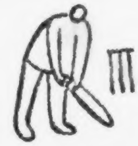
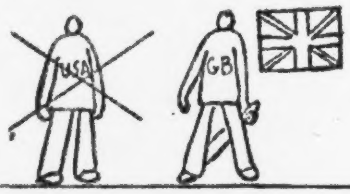
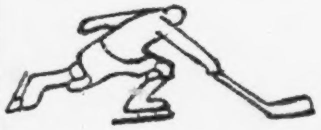
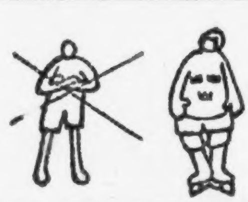
Soccer is played with a round ball.

①		a round ball	
②		rackets	
③		an oval ball	
④		clubs	
⑤		a bat	
⑥		a puck	

❋ 5

Is soccer played by men or women?

Soccer is played by men.

①		
②		
③		
④		
⑤		
⑥		

BRIDGE OVER TROUBLED WATER

When you´re weary, feeling small,
When tears are in your eyes,
I will dry them all;
I´m on your side.
When times get rough
And friends just can´t be found,
Like a bridge over troubled water
I will lay me down.
Like a bridge over truubled water
I will lay me down.

When you´re down and out,
When you´re on the street,
When evening falls so hard.
I will comfort you,
I´ll take your part.
When darkness comes
And pain is all around,
Like a bridge over troubled water
I will lay me down.
Like a bridge over troubled water
I will lay me down.

Sail on silvergirl,
Sail on by.
Your time has come to shine.
All your dreams are on their way.
See how they shine.
If you need a friend
I´m sailing right behind.
Like a bridge over troubled water
I will ease your mind.
Like a bridge over troubled water
I will ease your mind.

Exercise 6

Rättningsmall

WHAT ARE THESE THINGS MADE OF?

1. A cricket ball is made of leather.

2. Tennis balls are made of rubber.

3. A bat is made of wood.

4. Books are made of paper.

5. Our desks are made of wood.

6. A bottle is made of glass.

7. A golf club is made of metal.

Exercise 7

Rättningsmall

---

1. a) Many Swedish boys play ice-hockey. →

   b) Ice-hockey is played by many Swedish boys.

2. a) Thousands of Swedish people visit Italy every summer. →

   b) Italy is visited by thousands of Swedish people every summer.

3. a) Our teacher asks a lot of questions. →

   b) A lot of questions are asked by our teacher .

4. a) English students call this game 'rugger'. →

   b) This game is called 'rugger' by English students.

5. a) My secretary types all my letters. →

   b) All my letters are typed by my secretary

(EX 9)

LÄRARMANUS 1

Anvisningar	Ljud	Tid
Musik: Good Morning Starshine ur HAIR		
	Projektet GUME/Vuxna LEKTION EX 9	
	Välkomna till lektion nummer nio. Vi börjar med att friska upp minnet av vad vi gjorde förra gången.	(0200)
(Lägg på RAM I)	Vi såg bland annat på den här uppställningen över vad 'min', 'din', 'hans', 'hennes', 'vår', 'er', och 'deras' heter. När 'min' står ensamt, dvs inte följs av det ägda föremålet, så heter det 'mine'. 'Här är min' heter 'Here is mine'. Vad heter 'Det kan inte vara dina'? - - -	
(Lägg på Ö1)	It can't be yours.	
	Vi måste använda den självständiga formen med s på slutet därför att det ägda föremålet inte finns utsatt efteråt i meningen. - 'Hans' heter alltid bara 'his' och ingenting annat. 'Hennes' heter 'hers' när det står ensamt: -Is this the Queen's horse? -No, it can't be hers. Det ägda - hästen - följer inte efteråt i meningen och då har vi naturligtvis formen med s. Likadant med 'vår': -Our dog is white. -And ours is black. 'Ours' med s eftersom 'dog' inte står efter. 'Nej, det kan inte vara deras' slutligen, vad skall det heta? - - -	
(Lägg på Ö2)	No, it can't be theirs.	
(Ta bort RAM I)		

	Fyll i det som fattas i de här meningarna:	
(Lägg på RAM II)	1. De här pengarna k n inte vara dina. - - -	
(Lägg på Ö1)	This money can´t be yours.	
	2. Nej, det är inte mina. - - -	
(Lägg på Ö2)	No, it isn´t mine.	
	3. Det kan inte vara deras. - - -	
(Lägg på Ö3)	It can´t be theirs.	
	4. Det är inte hennes. - - -	
(Lägg på Ö4)	It isn´t hers.	
	Och så läser vi meningarna i kör efter Valerie allihop:	
	This money can´t be yours. /////	
	No, it isn´t mine. "	
	It can´t be theirs. "	
	It isn´t hers. "	
(Ta bort RAM II)	Thank you, listeners. And now, let´s do some written work. Open your workbooks at page 1. - - - Exercise one. Read the instructions and start working, please.	(0530)
	(Paus 2'00")	
(Lägg på Rättningsmall I när musiken börjar)	(Rättningsmusik 1'00")	
(Ta bort Rättningsmall I)	And now it´s time to read a new dialogue. Page two, please. This time it´s a conversation between a Swedish girl, Monika, and an English boy, Jack. They are talking about games. As usual, Roy and I are going to read the dialogue. Listen and follow the text on page two, please:	(0850)

(EX 9)

LÄRARMANUS 3

(Mönsterläsning av dial. EX 9)

Nu skall vi se lite på vad det här betyder. 'Games' (1045) är detsamma som 'sport', 'spel' som ni ser i marginalen. 'Soccer' är det som vi kallar för 'fotboll' och det är en förkortning av 'association football'. 'Rugby football' eller 'rugger' kallar vi här i Sverige för 'rugby'. Vi översätter lite. Rad tre:

Soccer? Vad är det?
Ah, jag antar ni kallar det fotboll i Sverige.
I England kallas det ofta soccer.

På den här sista raden - rad fem - står det egentligen:

I England är det ofta kallat soccer.

Men det låter bättre om vi säger 'kallas' i stället för 'är kallat'. - Vad betyder då nästa rad?

Why is it called soccer?

---Det kunde ni säkert:

Varför är det kallat soccer?

Eller naturligare:

Varför kallas det soccer?

Skriv det på den prickade linjen. 'Varför kallas det soccer?' ---

Vi kan gå fram en bit och se på rad tretton - rad tretton:

Where is rugby played?

Hur skulle vi säga det på svenska? - - - Vi skulle säga: Var är rugby spelat? Eller bättre:

Var spelas rugby?

En verbform som på svenska slutar på s kallas passiv. 'Spelas' är alltså passiv form. Se på rad 17:

Cricket is played with a bat and a small ball
which is made of leather.

Cricket spelas med ett slagträ och en liten
boll som är gjord av läder.

Vad heter alltså 'spelas' på engelska? - - - Bra: 'is played'. Stryk under det och skriv 'spelas' över.

(Lägg på Ram III) --- Jag ska förklara det här lite närmare. Titta på den här bilden. 'Kalla' heter på engelska 'call'. Passivformen 'kallas' heter 'is called' - eller 'are called' om det gäller flera stycken. Som ni ser använder man 'is' eller 'are' - och ibland 'be' - och så lägger man till -ed på verbet. - Hur skall man då säga mening nummer ett på engelska:

Det här spelet kallas tennis.

- - -

(Lägg på Ö1) This game is called tennis.

Två:

Vi kallar det här spelet tennis.

- - -

(Lägg på Ö2) We call this game tennis.

Här skall vi inte ha den passiva formen 'is called'. I den svenska meningen har vi 'kallar' med r, inte det passiva med s ('kallas'). - Hur blir nummer tre:

Rugby spelas med en oval boll.

- - -

(Lägg på Ö3) Rugby is played with an oval ball.

Nummer fyra slutligen. Tänk efter allihop:

Ishockey spelas på vintern.

- - -

(Lägg på Ö4) Ice-hockey is played in the winter.

And now, repeat the sentences after me, please:

This game is called tennis. /////
We call this game tennis. "
Rugby is played with an oval ball. "
Ice-hockey is played in the winter. "

(Ta bort Ram III) Good. And now let´s read the dialogue once again. (1630)
This time you read it after us, all of you. I
hope this time you´ll understand everything Jack
says about soccer and cricket. Let´s start, shall we:

(Körläsning av dialogen)

Thank you, listeners. Well, I think you know almost (1940)
everything about these games, and what is more
important, you know how to say it in English. Before
we go on, let´s listen to some music and relax for
a few minutes. Why don´t you join in and sing:

Musik
The Beatles, When I´m 64

Well, I hope you liked the record with the Beatles (2220)
and that you are ready to do some more work. This
time we´ll do some written exercises. Open your
workbooks at page three, please. Fill in the
missing words. Exercise 2, page three. Start working, please.

(Paus 1'30")

(Lägg på Rättningsmall II
när musiken börjar) (Rättningsmusik 45")

Read the correct sentences after me, please: (2500)
Books are made of paper. /////
A bottle is made of glass. "
This game is called rugby. "
Golf is played with a small ball. "
Ice-hockey is played with a puck. "
Thank you.

(Ta bort Rättnings-
mall II) Vi skall gå tillbaka till dialogen ett ögonblick. (2540)
Rad 17. Sidan två, rad 17. -
Cricket is played with a bat and a small ball
which is made of leather. It is played in the

summer, and a good match is watched by many people.

Cricket spelas med ett slagträ och en liten boll, som är gjord av läder. Det spelas på sommaren och en bra match ses av många människor.

Stryk under 'is made of' på rad 18 och skriv 'är gjord av' över. - - - Kom ihåg att 'av' heter 'of' när man talar om vad något är gjort av. Vad heter:

Den är gjord av glas.

- - -

It is made of glass.

Stryk också under på rad 19 'is watched by'. 'Ses av'. När 'av' används för att tala om vad människor gör
(Lägg på Ram IV) så har man 'by' på engelska. Jag repeterar: när man säger vilket material en sak är gjord av använder man 'of' och när man talar om vad som görs av personer använder man 'by'. Läs exemplen efter Valerie:

A bat is made of wood. /////
Soccer is played by men. "

(Lägg på Ö1) Vi övar. Vad heter:

Våra bänkar är gjorda av trä.

- - -

(Lägg på Ö2) Our desks are made of wood.

Ishockey spelas av svenska pojkar.

- - -

(Lägg på Ö3) Ice-hockey is played by Swedish boys.

Rugby kallas 'rugger' av studenterna.

- - -

(Lägg på Ö4) Rugby is called rugger by the students.

Read the sentences after me, please:

Our desks are made of wood. /////
Ice-hockey is played by Swedish boys. "
Rugby is called 'rugger' by the students. "

(Ta bort Ram IV)

Sådär. Härnäst skall vi göra en skriftlig övning på sidan 4. Sidan 4. Jag skall hjälpa er igång med nummer 1. Den meningen kan sägas på två sätt: (2920)

Many people watch a good football match.

eller

A good football match is watched by many people.

Fyll i 'is watched by many people'. 'En bra fotbollsmatch ses av många människor'. Ni kommer ihåg att när vi på svenska har en verbform som slutar på s - 'ses' t ex - så har engelskan -ed på verbet. Stryk under -ed i 'watched' som ni skrev. - - - Fortsätt nu att göra resten själva. Och tänk noga på vad jag har sagt.

(Paus 3'45")

(Lägg på Rättningsmall III
när musiken börjar)

(Rättningsmusik 1'15")

And now would you read the correct sentences after me, please: (3535)

A good football match is watched by many people. ///
Italy is visited by thousands of Swedish people every summer. "
A lot of questions are asked by our teacher. "
All my letters are typed by my secretary. "
Tennis balls are made of rubber. "
Baseball is played in America. "
Polo is played by rich people. "
This game is called cricket by the English. "
What is it made of? "
What is he called? "
Is ice-hockey played by men or women? "

(Ta bort Rättningsmall III)

Thank you. Let's finish today's lesson with our dialogue. You must be Monica, the Swedish girl. Roy will be Jack, and he will answer all your questions (3735)

(EX 9)

---

about English games. Open your workbooks please at page two. - - - Are you ready? - - Then start reading the dialogue NOW. (3800)

(Rolläsning)

Well, listeners, I hope you have learnt something about games today and about the English language as well. That's all for today, so would you return your workbooks to your teacher, please, while we play a record for you. Goodbye.

Goodbye. (3950)

Musik

Tonight ur West Side Story

A:32

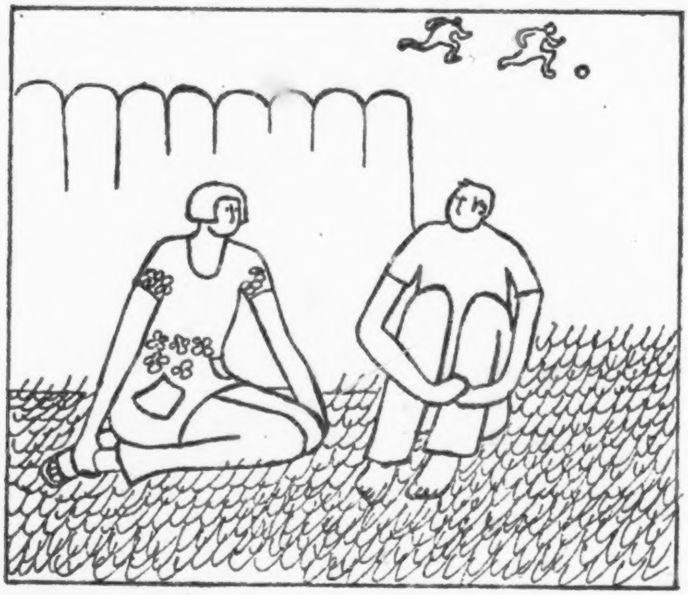
Projektet GUME/Vuxna

Specialkurs i engelska för vuxna

9

workbook

Games



Namn:______________________________

Grupp:__________ Datum:_________

265

Exercise 1

Fyll i det rätta ordet i övningen här nedan enligt följande exempel.

EXAMPLE: John has got a new bicycle.

Whose bike is it?

It´s ***his***.

Obs! Endast ett ord i varje lucka!

---

1. Frank Hunt has got a chemist´s shop.

   Whose shop is it?

   It´s ________.

2. My wife and I have got a summer house.

   Whose summer house is it?

   It´s ________.

3. Mrs Thomson has got a silver bracelet.

   Whose bracelet is it?

   It´s ________.

4. You have got English books.

   Whose books are they?

   They´re ________.

5. My children have got a sailing boat.

   Whose boat is it?

   It´s ________.

6. I´ve got a lot of stamps.

   Whose stamps are they?

   They´re ________.

Dialogue

Games

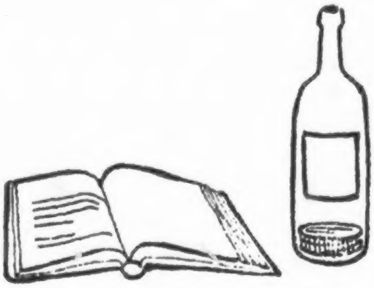
MONIKA:	Tell me something about games in England.	spel, sport
JACK:	Well, cricket and soccer are popular games.	fotboll
MONIKA:	Soccer? What's that?	
JACK:	Oh, I suppose you call it football in Sweden.	jag antar
	In England it's often called soccer.	
MONIKA:	Why is it called soccer?	
JACK:	In England we play two types of football, you see.	
	One of them is association football, or soccer	(vanlig) fotboll
	for short, and the other is rugby football.	förkortat
MONIKA:	Oh, I remember now. It's played with an oval	
	ball, isn't it?	
JACK:	That's right.	
MONIKA:	Where is rugby played?	
JACK:	It's mostly played at schools and universities.	för det mesta
	And it's called 'rugger' by the students.	
MONIKA:	Tell me something about cricket.	
JACK:	Cricket is played with a bat and a small ball	slagträ
	which is made of leather. It is played in the	läder
	summer, and a good match is watched by many people.	
MONIKA:	Isn't football, I mean soccer, played in the summer?,	
JACK:	No, in England it's played in the cold season.	

Exercise 2

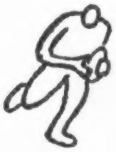
Fyll i det som fattas i de engelska meningarna.

1. Books _________ made of ____________.
(= Böcker är gjorda av papper.)

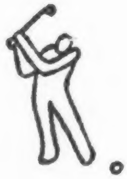
2. A bottle _____________________ glass.
(= En flaska är gjord av glas.)



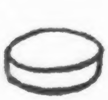
3. This game _______________________ rugby.
(= Det här spelet kallas rugby.)



4. Golf _____________________ with a small ball.
(= Golf spelas med en liten boll.)



5. Ice-hockey ________________________________ puck.
(= Ishockey spelas med en puck.)



Exercise 3

Fyll i luckorna med de engelska ord som fattas.

1. a) Many people watch a good football match. =

   b) *A good football match is* _______________ *by* _______________________.

2. a) Thousands of Swedish people visit Italy every summer. =

   b) *Italy* _____________________ *by thousands of* __________________________ *every summer.*

3. a) Our teacher asks a lot of questions. =

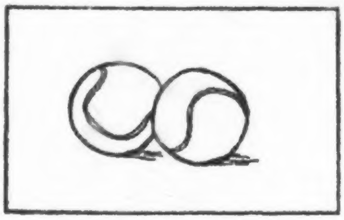
   b) *A lot of questions are* _____________ *by* ____________________________.

4. a) My secretary types all my letters. =

   b) *All my letters* __________________________________ *secretary.*

- -

5. Tennis balls ________________________ rubber.
   (= Tennisbollar är gjorda av gummi.)



6. Baseball ______________________ in America.
   (= Baseball spelas i Amerika.)

7. Polo ________________________ rich people.
   (= Polo spelas av rika människor.)

8. This game ____ the English.
   (= Det här spelet kallas cricket av engelsmännen.)

9. What ________________________________?
   (= Vad är den gjord av?)

10. What ______________________________?
    (= Vad är han kallad? = Vad kallas han?)

11. ____
    (= Spelas ishockey av
    men or women?
    män eller kvinnor?)

(EX 9) RAM I

Min	MY MINE	HERE IS MINE
Din	YOUR YOURS	IT CAN´T BE YOURS.
Hans	HIS	
Hennes	HER HERS	NO, IT CAN´T BE HERS.
Vår	OUR OURS	AND OURS IS BLACK.
Er	YOUR YOURS	
Deras	THEIR THEIRS	NO, IT CAN´T BE THEIRS.

1. This money can´t be YOURS .

2. No, it isn´t MINE .

3. It can´t be THEIRS .

4. It isn´t HERS .

Exercise 1 Rättningsmall (I)

Fyll i det rätta ordet i övningen här nedan enligt följande exempel.

EXAMPLE: John has got a new bicycle.
Whose bike is it?
It's *his*.

Obs! Endast ett ord i varje lucka!

---

1. Frank Hunt has got a chemist's shop.
Whose shop is it?
It's his .

2. My wife and I have got a summer house.
Whose summer house is it?
It's ours .

3. Mrs Thomson has got a silver bracelet.
Whose bracelet is it?
It's hers .

4. You have got English books.
Whose books are they?
They're yours .

5. My children have got a sailing boat.
Whose boat is it?
It's theirs

6. I've got a lot of stamps.
Whose stamps are they?
They're mine .

(EX 9) RAM !!! A:40

kalla = CALL

kallas = IS CALLED

ARE CALLED

---

1. Det här spelet kallas tennis.

= THIS GAME IS CALLED TENNIS.

2. Vi kallar det här spelet tennis.

= WE CALL THIS GAME TENNIS.

3. Rugby spelas med en oval boll.

= RUGBY IS PLAYED WITH AN OVAL BALL.

4. Ishockey spelas på vintern.

= ICE-HOCKEY IS PLAYED IN THE WINTER.

(Lektion EX 9: SÅNGTEXT)

WHEN I´M SIXTY-FOUR

When I get older losing my hair,
Many years from now.
Will you still be sending me a Valentine
Birthday greetings bottle of wine.
If I´d been out till quarter to three
Would you lock the door,
Will you still need me,
will you still feed me,
When I´m sixty-four.
You´ll be older too,
And if you say the word,
I could stay with you.
I could be handy, mending a fuse
When your lights have gone.
You can knit a sweater by the fireside
Sunday morning go for a ride,
Doing the garden, digging the weeds,
Who could ask for more.
Will you still need me,
will you still feed me,
When I´m sixty-four.

Every summer we can rent a cottage,
In the Isle of Wight, if it´s not too dear
We shall scrimp and save
Grandchildren on your knee
Vera Chuck & Dave
Send me a postcard, drop me a line,
Stating point of view
Indicate precisely what you mean to say
Yours sincerely, wasting away
Give me your answer, fill in a form
Mine for evermore
Will you still need me,
will you still feed me.
When I´m sixty-four.

☆ Rättningsmall
(II)

Exercise 2

Fyll i det som fattas i de engelska meningarna.

1. Books are___ made of paper___.
(= Böcker är gjorda av papper.)

2. A bottle _is__made__of glass.
(= En flaska är gjord av glas.)

3. This game __is__called___ rugby.
(= Det här spelet kallas rugby.)

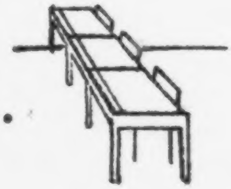
4. Golf is played___ with a small ball.
(= Golf spelas med en liten boll.)

5. Ice-hockey is played with a puck.
(= Ishockey spelas med en puck.)

(EX 9)

		AV	
(Material):	A BAT IS MADE	OF	WOOD.
(Personer):	SOCCER IS PLAYED	BY	MEN.

1. OUR DESKS ARE MADE OF WOOD.



2. ICE-HOCKEY IS PLAYED BY

SWEDISH BOYS.

3. RUGBY IS CALLED RUGGER

BY THE STUDENTS.

Exercise 3 Rättningsmall
(III)

Fyll i luckorna med de engelska ord som fattas.

1. a) Many people watch a good football match. =
   b) *A good football match is* watched *by* many people.

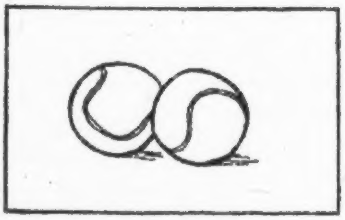
2. a) Thousands of Swedish people visit Italy every summer. =
   b) *Italy* is visited *by thousands of* Swedish people *every summer.*

3. a) Our teacher asks a lot of questions. =
   b) *A lot of questions are* asked *by* our teacher.

4. a) My secretary types all my letters. =
   b) *All my letters* are typed by my *secretary.*

---

5. Tennis balls are made of rubber.
(= Tennisbollar är gjorda av gummi.)



6. Baseball is played in America.
(= Baseball spelas i Amerika.)

7. Polo is played by rich people.
(= Polo spelas av rika människor.)

8. This game is called cricket by the English.
(= Det här spelet kallas cricket av engelsmännen.)

9. What is it made of?
(= Vad är den gjord av?)

10. What is he called?
(= Vad är han kallad? = Vad kallas han?)

11. Is ice-hockey played by
(= Spelas ishockey av
men or women?
män eller kvinnor?)

The Oral Structure Drills

This list presents the example items to the oral structure drills included in the implicit lesson series. The underlined sentence of each item represents the students´ response.

The figures in the various columns give the lesson numbers, the exercise numbers, and the grammatical structure practised in the drill, according to the following order: 1 = some/any; 2 = adjective/ adverb; 3 = preposition + the gerund; 4 = possessive pronouns; 5 = the passive voice.

The last two columns indicate the number of items practised and the number of pictures underlying the drill.

Lesson	Exercise	Structure	Example Item of the Drill	Number of: Items	Pictures
1	1	1	What would you like to have? I´d like some coffee.	6	8
1	2	1	I´d like some coffee. I´m sorry but we haven´t got any coffee.	8	8
1	3	1	Have we got any coffee? Yes, we have got some in the kitchen.	8	8
1	5	1	Is there any wine in the fridge? No, there isn´t any wine, but there is some beer.	4	4
1	6	1	Are there any oranges in the kitchen? No, there aren´t any oranges, but there are some apples.	4	4
1	7	1	Is there any wine in the fridge? No, there isn´t any wine, but there´s some beer.	4	4
2	1	1	Is there any --- in the fridge? Yes, there is some. / No, there isn´t any.	6	1

Lesson	Exercise	Structure	Example Item of the Drill	Number of: Items	Number of: Pictures
2	2	1	Ask if they´ve got any newspapers. Have you got any newspapers?	6	1
2	4	1	Is there anything in this room? No, there isn´t anything in this room.	6	8
2	5	1	Can you see anything in this room? Yes, I can see something. I can see some chairs.	8	8
2	6	1	Can you see anybody in the room? Yes, I can see somebody. I can see some boys.	8	8
2	7	1	Is there anybody in this room? No, there isn´t anybody in this room.	6	8
2	9	1	There isn´t anything on the radio. → There´s nothing on the radio.	6	-
3	1	1	Is there anything on the television? No, but there´s something on the radio.	6	6
3	2	1	Is there anybody in the classroom? No, there isn´t anybody in the classroom. → No, there´s nobody in the classroom.	6	6
3	4	1	Have some meatballs. → Would you like some meatballs?	7	8
3	5	1	Would you like some --- ? Yes, please. / No, thank you.	8	8
3	6	1	Can I have some more --- ? I´m sorry, there´s/there are hardly any --- left.	7	8
3	8	1	What shall we do? You can do anything you like.	8	-
4	1	1	Is it easy to make meatballs? Oh yes, anybody can make meatballs.	8	8
4	4	2	What kind of a driver is --- ? --- is a careful/careless driver.	6	6
4	5	2	Tell me how --- drives. --- drives carefully/carelessly.	6	6
4	6	2	Is Mary a quick or a slow reader? Mary is a quick reader.	6	6

Lesson	Exercise	Structure	Example Item of the Drill	Number of: Items	Pictures
4	7	2	Mary is a quick reader. How does she read? She reads quickly.	6	6
4	10	2	Mary reads quickly. What can you say about her? Mary is a quick reader.	6	-
4	11	2	Tell me how an angry man shouts. An angry man shouts angrily.	7	-
5	1	2	What kind of a reader is Mary? She is a quick reader. Well, how does she read? She reads quickly.	6	6
5	2	2	What is a slow reader? A slow reader is a person who reads slowly.	6	-
5	4	2	This is an excellent actor. → This is a very good actor.	4	6
5	5	2	This man acts excellently. → This man acts very well.	4	6
5	6	2	Tell me how she swims. She swims fast.	8	8
5	7	2	Is this a good teacher? No, he doesn´t teach very well.	8	8
5	9	2	What is a good teacher? A good teacher is somebody who teaches well.	6	-
6	1	2	Don´t you think this is a fast typist? Oh yes. She certainly types fast.	8	8
6	3	3	Do you like to dance? Yes, I´m very fond of dancing. Do you like to play golf? No, I´m not very fond of playing golf.	8	8
6	4	3	Do you like to dance? Yes, I´m keen on dancing. Do you like to play golf? No, I´m tired of playing golf.	8	8
6	5	3	Why don´t you play football? I´m not interested in playing football.	6	6
6	6	3	Does Pelé play football well? Yes, he is very good at playing football.	6	6

Lesson	Exercise	Structure	Example Item of the Drill	Number of:	
				Items	Pictures
6	9	3	Let´s go for a walk. What´s the point in going for a walk?	5	5
7	1	3	I´m tired of reading. What about going for a walk? OK. Let´s go for a walk instead of reading.	6	6
7	3	3	You must wash before you dress. → You must wash before dressing.	6	8
7	4	3	Tell me how a professional dancer makes money. A professional dancer makes money by dancing.	6	-
7	7	4	Whose hat is this? It´s mine. Whose ball-pen is this? It must be yours.	8	8
7	8	4	My dog is white. And yours? Mine is black.	5	5
8	1	4	Look at these dogs. How different they are. Yes, mine is white and yours is black.	5	5
8	4	4	Whose is the swimming-pool? It´s ours. Whose is the garage? It´s theirs.	8	1
8	5	4	Do these chocolates belong to Susan or Jim? They must be hers.	6	6
8	6	4	This hat belongs to Uncle Sam, I suppose. Yes, it must be his.	8	8
9	1	4	Is this the President´s plane? No, it can´t be his.	8	8
9	3	5	We call this game soccer. → This game is called soccer.	6	6
9	4	5	What´s soccer played with? Soccer is played with a round ball.	6	6
9	5	5	Is soccer played by men or women? Soccer is played by men.	6	6

Lesson	Exercise	Structure	Example Item of the Drill	Number of:	
				Items	Pictures
9	8	5	Is ice-hockey played in the summer or in the winter? Ice-hockey is played in the winter.	8	-
10	2	5	Where is cricket played? Cricket is played in Britain.	6	-
10	4	5	Must I close my book? Yes, all books must be closed.	8	8
10	7	5	It´s father who paints the boat. → The boat is painted by father.	8	8
10	8	5	By whom is the boat painted? The boat is painted by father.	8	8

APPENDIX 2

The Distribution of Lesson Time to the Various Activities

The tables on the following two pages show the time distribution over the various activities included in the two experimental lesson series. The list below is to clarify the symbols used in the tables.

1 Explanations (EX only)

2 The Dialogue
  2a Model reading. Students´ books closed.
  2b Model reading. Students´ books open.
  2c Words and expressions. Reading in chorus after model.
  2d Reading in chorus of entire dialogue after model.
  2e Reading of dialogue exchanges alternately by students and teacher.

3 Oral Exercises
  3a Presentation of oral drill with examples (IM only).
  3b Active drilling (IM only).
  3c Oral translation exercise (EX only).
  3d Repetition in chorus of model sentences (EX only).

4 Written Exercises
  4a Presentation of exercise with instructions and examples.
  4b Time for writing and correcting exercise.
  4c Reading of corrected exercise by teachers. Students follow in their workbooks, or--in some lessons--repeat in chorus.

5 Non-instructional Activity (music, information and instructions in Swedish, etc.)

THE DISTRIBUTION OF LESSON TIME TO THE VARIOUS ACTIVITIES (IM)

Activity \ Lesson		1	2	3	4	5	6	7	8	9	10	1 - 10
2 The Dialogue	2a	1'08"	1'18"	1'13"	1'15"	1'07"	1'09"			1'38"		8'48"
	2b	0'43"	1'18"	1'21"	1'21"	1'10"	1'01"	2'21"	1'41"	1'32"	1'46"	14'14"
	2c	1'50"	2'15"	1'09"	2'54"	2'23"	2'33"	1'44"	1'46"	2'	2'12"	20'46"
	2d	1'51"	2'40"	2'53"	2'16"	3'32"	2'53"	4'02"	4'02"	2'52"	3'25"	30'26"
	2e	1'15"		1'08"	1'42"			1'43"	1'58"	2'02"		9'48"
	2a-e	6'47"	7'31"	7'44"	9'28"	8'12"	7'36"	9'50"	9'27"	10'04"	7'23"	84'02"
3 Oral Exercises	3a		6'05"	6'16"	4'44"	7'30"	5'06"	3'34"	4'06"	4'21"	3'28"	45'11"
	3b	8'23"	9'18"	8'57"	9'27"	10'39"	7'39"	7'43"	5'46"	7'48"	7'30"	83'10"
	3a-b	8'23"	15'24"	15'13"	14'11"	18'09"	12'45"	11'17"	9'52"	12'09"	10'58"	128'21"
4 Written Exercises	4a	0'24"	0'26"	1'44"	1'43"	1'36"	1'40"	2'55"	3'22"	2'12"	2'42"	18'44"
	4b	3'50"	5'50"	7'24"	8'18"	7'15"	8'23"	9'47"	9'15"	8'51"	9'46"	78'39"
	4c	1'02"	0'57"	1'13"	2'03"	1'23"	2'05"	1'16"	2'24"	1'11"	3'11"	16'45"
	4a-c	5'16"	7'13"	10'21"	12'04"	10'14"	12'08"	13'58"	15'01"	12'14"	15'39"	114'08"
Net Time	(2-4)	20'26"	30'08"	33'18"	35'43"	36'35"	32'29"	35'05"	34'20"	34'27"	34'00"	326'31"
Non-instructional Activity	5	23'01"	13'47"	8'21"	7'15"	6'48"	9'29"	6'39"	6'32"	7'11"	7'14"	96'17"
Total Time of Lessons	(1-5)	43'27	43'55"	41'39"	42'58"	43'23"	41'58"	41'44"	40'52"	41'38"	41'14"	422'48"

THE DISTRIBUTION OF LESSON TIME TO THE VARIOUS ACTIVITIES (EX)

Activity \ Lesson		1	2	3	4	5	6	7	8	9	10	1 - 10
Explanations	1	9'41"	8'48"	8'47"	9'39"	7'06"	6'05"	5'37"	4'57"	8'03"	5'05"	73'48"
2 The Dialogue	2b	0'47"	1'41"	1'15"	1'18"	1'14"	1'06"	0'36"	1'36"	1'52"	1'47"	13'12"
	2c					0'54"	1'03"	0'47"	0'54"		3'26"	7'04"
	2d	2'06"	3'07"	2'36"	2'50"	2'49"	3'14"	5'24"	3'43"	3'10"		28'59"
	2e		1'27"						2'04"	2'08"	2'00"	7'39"
	2b-e	2'53"	6'15"	3'51"	4'08"	4'57"	5'23"	6'47"	8'17"	7'10"	7'13"	56'54"
3 Oral Exercises	3c	4'58"	5'28"	5'10"	6'35"	2'23"	5'54"	5'48"	4'37"	3'24"	7'24"	51'41"
	3d	1'03"	2'34"	2'28"	1'27"	2'48"	1'45"	3'18"	1'01"	2'43"	2'07"	21'14"
	3c-d	6'01"	8'02"	7'38"	8'02"	5'11"	7'39"	9'06"	5'38"	6'07"	9'31"	72'55"
4 Written Exercises	4a		0'45"	0'40"			1'03"	0'46"	2'50"	0'43"	0'36"	7'23"
	4b	9'11"	10'10"	10'55"	11'42"	11'20"	10'27"	10'47"	7'49"	10'14"	9'28"	102'03"
	4c			1'20"		2'59"	0'42"	1'31"	2'54"	2'37"	3'11"	15'14"
	4a-c	9'11"	10'55"	12'55"	11'42"	14'19"	12'12"	13'04"	13'33"	13'34"	13'15"	124'40"
Net Time	(1-4)	27'46"	34'00"	33'11"	33'31"	31'33"	31'19"	34'34"	32'25"	34'54"	35'04"	328'17"
Non-instructional Activity	5	14'37"	8'07"	8'28"	8'37"	10'28"	8'21"	6'20"	6'01"	6'54"	7'17"	85'10"
Total Time of Lessons	(1-5)	42'23"	42'07"	41'39"	42'08"	42'01"	39'40"	40'54"	38'26"	41'48"	42'21"	413'27"

APPENDIX 3

Evaluation Instruments

A:54

GÖTEBORGS STADS VUXENGYMNASIUM
Tibor von Elek
Mats Oskarsson

DIAGNOSTISKT PROV I ENGELSKA

The Proficiency Test

OBS! Skriv ingenting i detta provhäfte. Alla svar ges på bifogad svarsblankett.

DEL I.

Här följer 15 meningar. Ett ord har utelämnats i varje mening. Markera att du kan ordet genom att kryssa för rätt begynnelsebokstav i bokstavsraden på svarsblanketten.

EXEMPEL: My father and my mother are my ---.
Det rätta ordet är 'parents'. Den rätta markeringen är alltså: O [✓ P] R S

---

1. Stockholm is the ----- of Sweden.
2. Today is Monday. ----- was Sunday.
3. Tell me something ----- your family.
4. After summer comes -----.
5. The Swedish flag is blue and -----.
6. The brother of your father is your -----.
7. I´m sorry I´m -----. I missed the bus, you see.
8. 'What´s in that box?' - 'Nothing, It´s -----.'
9. Many animals (like cats and foxes) have long -----.
10. I don´t understand this. Please ----- it to me.
11. The OPPOSITE (= motsats) of peace is -----.
12. Things that children play with are called -----.
13. Please wash your hands.They are -----.
14. Birds and aeroplanes can´t fly without -----.
15. Cars have four -----, bicycles have only two.

(Diagn. test. forts.)

A:55

DEL II.

I denna avdelning har ett ord i varje mening strukits under. Under varje mening finns fyra alternativ till det understrukna ordet. Ett av dem betyder samma sak som det understrukna. Markera med kryss det rätta alternativet på motsvarande rad på svarsblanketten.

EXEMPEL: We learn English.

A. *study* B. *like* C. *speak* D. *teach*

Det är ordet 'study' dvs alternativ A som betyder samma sak som 'learn.' A B C D

Den rätta markeringen är alltså: (x) () () ()

---

16. My neighbours are very nice.
    - A. *people next door*
    - B. *school-mates*
    - C. *flowers*
    - D. *servants*

17. My friends live in a beautiful valley.
    - A. *flat*
    - B. *district outside the city*
    - C. *small town*
    - D. *land between mountains*

18. He won't come unless you invite him.
    - A. *if you invite*
    - B. *if you don't invite*
    - C. *although you invite*
    - D. *as you invite*

19. I think this picture is ugly.
    - A. *interesting*
    - B. *small*
    - C. *not beautiful*
    - D. *not amusing*

20. John writes rapidly.
    - A. *badly*
    - B. *quickly*
    - C. *carelessly*
    - D. *efficiently*

21. This city is well known for its harbour.
    - A. *population*
    - B. *treasure*
    - C. *district where poor people live*
    - D. *place for ships*

22. That was a dull play.
    - A. *stupid*
    - B. *sad*
    - C. *unimportant*
    - D. *uninteresting*

23. His parents are abroad.
    - A. *in a foreign country*
    - B. *on a ship*
    - C. *separated*
    - D. *intelligent*

24. I must go to the grocer
    - A. *person who sells clothes*
    - B. *person who sells almost everything*
    - C. *person who sells large quantities of something*
    - D. *person who sells food*

25. Their garden is full of weeds.
    - A. *small birds*
    - B. *small trees*
    - C. *wild plants*
    - D. *bushes*

26. This book was expensive.
    - A. *interesting*
    - B. *difficult to understand*
    - C. *not cheap*
    - D. *not small*

27. June is a pleasant person.
    - A. *nice*
    - B. *humourous*
    - C. *busy*
    - D. *kind*

28. How can you waste your money like that?
    - A. *earn*
    - B. *lose*
    - C. *spend*
    - D. *save*

29. Our teacher is upstairs.
    - A. *in a hurry*
    - B. *on the next floor*
    - C. *very angry*
    - D. *strong*

30. He is leaving tomorrow morning.
    - A. *having breakfast*
    - B *coming back*
    - C. *going away*
    - D. *getting up*

DEL III.

I varje mening härnedan finns tre alternativ. Endast ett av dem är rätt. Markera detta med ett kryss i rätt parentes på svarsblanketten. Sätt ett kryss även om Du är osäker eller inte kan.

(a) *was*
31. We (b) *were* in England in 1968.
(c) *is*

(a) *do*
32. Father (b) *don't* speak English.
(c) *doesn't*.

(a) *answer*
33. Can you (b) *answers* the questions?
(c) *answered*

(a) *at*
34. Look (b) *on* the picture.
(c) *in*

(a) *this*
35. Are (b) *these* books new?
(c) *that*

(a) *any*
36. I can see (b) *some* apples on the table.
(c) *anything*

(a) *your*
37. Where is (b) *yours* car?
(c) *you*

(a) *want*
38. John (b) *wants* to go to the pictures.
(c) *wanting*

(a) *knife*
39. How many (b) *knifes* have you got?
(c) *knives*

(a) *who*
40. I saw a policeman (b) *whom* stopped a bus.
(c) *which*

(a) *Did*
41. (b) *Does* you go to work yesterday?
(c) *Do*

(a) *was*
42. Bill and Sue (b) *were* here yesterday.
(c) *where*

(a) *likes swimming*
43. He (b) *likes swims* very much.
(c) *likes swim*

(a) *drink*
44. They said that Peter only (b) *drinked* water.
(c) *drank*

(a) *is it*
45. How many minutes (b) *is there* in an hour?
(c) *are there*

(a) *Man*
46. (b) *Mans* like football.
(c) *Men*

(a) *The skys colour*
47. (b) *The skies colour* is blue.
(c) *The colour of the sky*

(a) *maid by*
48. This bag was (b) *made by* my brother.
(c) *made of*

(a) *shook*
49. The stranger (b) *shaked* my hand and left.
(c) *shake*

(a) *easy*
50. It is (b) *easier* to read than to write.
(c) *easyer*

(a) *very skilful*
51. This vase is (b) *very skilfully* done.
(c) *much skilfully*

(a) *you can never*
52. In this room (b) *can you never* play or sing.
(c) *can never you*

(a) *quietly*
53. Leamington is a (b) *quite* place.
(c) *quiet*

(a) *in*
54. New York is hot (b) *on* the summer.
(c) *at*

(a) *be*
55. The money (b) *is* on the table.
(c) *are*

(a) *friend of his*
56. I met a (b) *friend of him* in London.
(c) *friend of he*

(a) *It´s*
57. (b) *There´s* somebody in the garden.
(c) *Its*

(a) *to have left*
After (b) *leaving* school he went abroad.
(c) *leaving of*

(a) *to*
59. I will meet you (b) *at front of* the church.
(c) *in*

(a) *shan´t*
60. If I were you, I (b) *won´t* take that job.
(c) *wouldn´t*

SVARSBLANKETT
till diagnostiskt prov i engelska

NAMN: ______________________________

Grupp: __________ Datum ___/___ 197

Antal rätt: ____/60

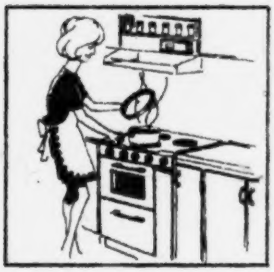
OBS! Markera rätt alternativ med X (kryss), ej med ring.
Endast ett alternativ får markeras!
Markera alltid ett av alternativen, även om du är osäker på svaret.

DEL I.					DEL II.					DEL III.							
						A	B	C	D		A	B	C		A	B	C
1.	H	C	B	W	16.	()	()	()	()	31.	()	()	()	46.	()	()	()
2.	Y	T	I	Q	17.	()	()	()	()	32.	()	()	()	47.	()	()	()
3.	F	A	W	B	18.	()	()	()	()	33.	()	()	()	48.	()	()	()
4.	D	H	S	A	19.	()	()	()	()	34.	()	()	()	49.	()	()	()
5.	W	G	B	Y	20.	()	()	()	()	35.	()	()	()	50.	()	()	()
6.	U	F	O	B	21.	()	()	()	()	36.	()	()	()	51.	()	()	()
7.	F	L	S	B	22.	()	()	()	()	37.	()	()	()	52.	()	()	()
8.	L	E	T	C	23.	()	()	()	()	38.	()	()	()	53.	()	()	()
9.	S	T	B	U	24.	()	()	()	()	39.	()	()	()	54.	()	()	()
10.	E	F	G	H	25.	()	()	()	()	40.	()	()	()	55.	()	()	()
11.	C	K	W	M	26.	()	()	()	()	41.	()	()	()	56.	()	()	()
12.	L	R	T	O	27.	()	()	()	()	42.	()	()	()	57.	()	()	()
13.	I	S	P	D	28.	()	()	()	()	43.	()	()	()	58.	()	()	()
14.	F	V	W	P	29.	()	()	()	()	44.	()	()	()	59.	()	()	()
15.	V	H	R	W	30.	()	()	()	()	45.	()	()	()	60.	()	()	()

PACT - Pictorial Auditory Comprehension Test

(Sample Items)

1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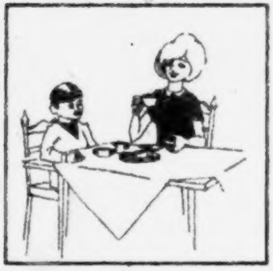
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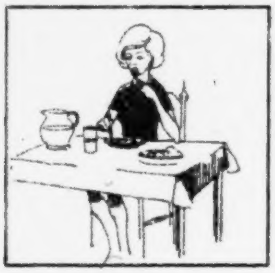
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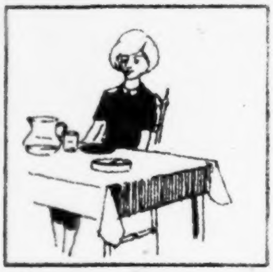
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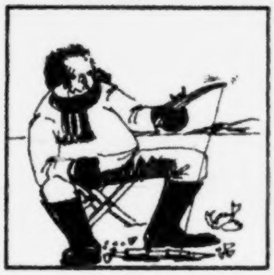
Item 1 (example). The student hears: "Mother is making dinner."

9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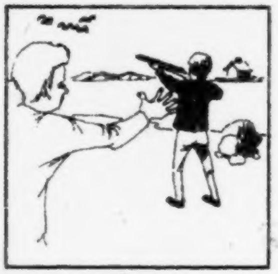
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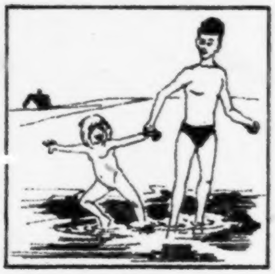
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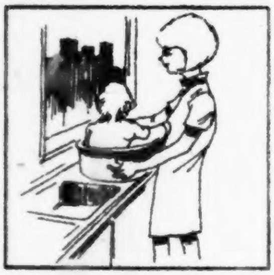
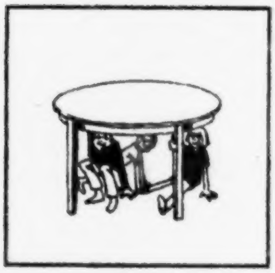

d

Item 9. The student hears: "I remember when I was a child. Mummy used to give me a bath in the kitchen. In the autumn Daddy often shot ducks by this lake. In summer I didn't like to swim when the water was cold. But now I like cold weather very much and often stay here the whole day."

13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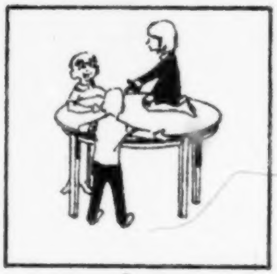
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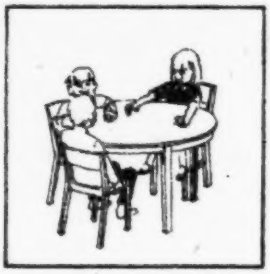
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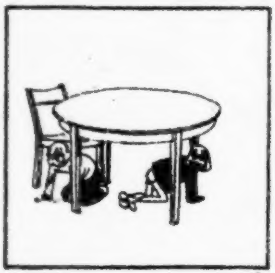

d

Item 13. The student hears: "Peter isn't under the table with the other children now. And he is not standing near it either. Where is he, do you think?"

(Answers were given by checking the appropriate box for each item on an answer sheet.)

Part A of the Achievement Test. Tapescript

Instruktion till muntligt prov:

Som de flesta av er väl redan vet, så kommer ni inom kort att få en specialkurs i engelska. Vad den kursen innebär, skall vi närmare tala om när den börjar. Redan nu kan vi emellertid tala om att det är fråga om en kurs, som är gjord av lärare från lärarhögskolan, universitetet och vuxengymnasiet i Göteborg tillsammans, och som är gjord särskilt för vuxna studerande. Ni kommer inte att få några extra hemuppgifter i samband med kursen och studiematerialet får ni gratis. Avsikten med kursen är att hjälpa er med sådant som är särskilt svårt på det här stadiet.

För att kursen skall ge bästa möjliga utdelning, behöver vi emellertid veta något lite om era förkunskaper. I regel varierar vuxnas förkunskaper ganska mycket, speciellt i ett ämne som engelska. En del av er har i tidigare skola fått god muntlig träning men sämre övning i att skriva, för andra kan det vara tvärtom.

Därför vill vi ge er två mindre prov, det ena nu och det andra om några dar. Prov ja, det kanske inte låter så stimulerande, men det är inte fråga om att betygsätta er utan istället att klargöra för oss hur undervisningen skall läggas upp. Vi hoppas därför att ni gör ert bästa och besvarar frågorna så gott det går. Den som vill kan f.ö. få reda på resultatet senare.

Förresten, vad gäller provet är det naturligtvis så, att en hel del av det som frågas efter är sådant som vi senare kommer att undervisa om i specialkursen. Det är alltså orimligt att begära att ni skall kunna sådant som ni ännu inte mött. Men än en gång, vi vill se om kanske någon eller några redan kan så mycket, att vår planerade kurs är olämplig för dem. Men kom ihåg, att vara "dålig" på det här provet, om ni tillåter uttrycket, det är faktiskt helt i sin ordning.

Medan vi spelar en skiva för er, delar läraren ut svarsblanketter.

Musik.

Nu hoppas jag att ni har fått blanketterna och har skrivit namn, grupp och datum på framsidan. På samma sida har vi tre övningsexempel. Ta en titt på övningsexempel 1. Ni kan se 3 ord. Nu ska ni lyssna noga.

1. SHE: Can you speak English?
HE: Yes, I ...
... can.
... do.
... am.

Jag hoppas ni förstod den här enkla konversationen och att ni även förstod att svaret var ofullständigt. Det blir alltså er uppgift att komplettera den sista meningen av varje dialog ni hör. I detta fall är det ordet 'can' som kompletterar svaret. Kryssa för ordet 'can'. När dialogen är komplett skall den alltså låta så här:

SHE: Can you speak English?
HE: Yes, I can.

Övningsexempel 2. När ni har avlyssnat följande skall ni kryssa för det alternativ som ni anser kompletterar sista meningen. Lyssna.

2. SHE: Where do the Wilsons live?
HE: They´ve got a house ...
... on the village.
... in the village.
... by the village.

Rätt alternativ i övningsexempel 2 är 'in the village'. Jag hoppas att ni har kryssat för detta alternativ. Och nu följer 3:e och sista övningsexemplet:

3. HE: What are you going to buy in that shop?
SHE: I want to buy new stockings for my ...
... child´s.
... children.
... children´s.

Jag hoppas att ni har kryssat för alternativet 'children', vilket är det enda möjliga som komplement till sista meningen. Och nu börjar vi själva provet. (Vänd blad)

Och så en sak till innan vi börjar själva provet. Ni kommer inte att ha mycket tid på er, det gäller alltså att göra förprickningarna ganska fort. Och om det är så att ni inte är säkra på vilket alternativ det är fråga om, så gör gärna en gissning. Pricka alltså för ett alternativ vid varje fråga.

Efter provet:

Och detta var hela provet. Tack för er medverkan. Vi hör av oss senare.

Eleven hör: (The student hears)	Eleven ser på svarsblanketten: (Answer sheet)
1. HE: It´s so hot. I´m very thirsty. SHE: I´m going to make some lemonade. Would you like ...	1 ☐ ... some? ☐ ... any? ☐ ... anything?
2. HE: What kind of a person is Dr. Allen? SHE: I like him very much. He is always so ...	2 ☐ ... nicely. ☐ ... happily. ☐ ... kind.
3. SHE: The Wilsons have hundreds of books in their livingroom. HE: Yes. They are all very fond of ...	3 ☐ ... read. ☐ ... reading. ☐ ... to read.
4. HE: Is this your new tooth-brush? SHE: No, I´ve got mine in my hand. I think it´s ...	4 ☐ ... yours. ☐ ... your. ☐ ... your one.
5. SHE: What was President Kennedy´s first name? HE: His first name was John, but he was called Jack ...	5 ☐ ... by everybody. ☐ ... of everybody. ☐ ... from everybody.
6. SHE: So you´re going to New York. Are you going to visit your friends? HE: No, my friends live in Washington. In New York I have ...	6 ☐ ... any friends. ☐ ... nobody friends. ☐ ... no friends.
7. SHE: Are you coming to the party tonight? HE: I´m afraid not. We´re having a test tomorrow and I must ...	7 ☐ ... hardly study. ☐ ... study hardly. ☐ ... study hard.
8. SHE: Good-bye, love. HE: Good-bye, darling. Have a good trip and don´t forget ...	8 ☐ ... write. ☐ ... writing. ☐ ... to write.
9. HE: Where are the girls? SHE: They are sitting in ...	9 ☐ ... they room. ☐ ... their room. ☐ ... theirs room.
10. HE: I´d like a glass of whisky. SHE: I´m sorry we don´t serve alcohol here. HE: Oh. What a pity. Can you tell me where ...	10 ☐ ... alcohol serves? ☐ ... alcohol is served? ☐ ... alcohol is serving?

11. HE: Good morning, Mrs Williams. What would you like to buy today?
SHE: I´m having a tea-party today, and I´d like to buy ...

11
☐ ... some nice.
☐ ... something nice.
☐ ... anything nice.

---

12. HE: Why don´t you like these boys?
SHE: Because they are ...

12
☐ ... no politely.
☐ ... not politely.
☐ ... not polite.

---

13. HE: Why don´t you ride your bike, Pamela?
SHE: I can´t ride a bike.
HE: You must try. You can´t learn to ride a bike without ...

13
☐ ... trying.
☐ ... to try.
☐ ... try.

---

14. SHE: Is THIS Sylvia´s desk?
HE: No, this is my desk. THAT one is ...

14
☐ ... her.
☐ ... hers.
☐ ... hers desk.

---

15. SHE: What do you know about astronomy?
HE: Not much. I know that it ...

15
☐ ... is studied at universities.
☐ ... studies at universities.
☐ ... studied at universities.

---

16. SHE: Could I have some of your special chocolates?
HE: I´m very sorry, but we haven´t got ...

16
☐ ... no left.
☐ ... some left.
☐ ... any left.

---

17. SHE: How is my daughter doing at school, Mr Smith?
HE: Oh, she is my best pupil. She always gives ...

17
☐ ... answers correct.
☐ ... correct answers.
☐ ... correctly answers.

---

18. SHE: Why don´t you collect stamps?
HE: Because I´m not interested in ...

18
☐ ... collecting stamps.
☐ ... collect stamps.
☐ ... to collect stamps.

---

19. SHE: Is your house big?
HE: Well, it´s just as big as ...

19
☐ ... his.
☐ ... their.
☐ ... your.

---

20. HE: Is Mallorca a popular place?
SHE: Oh yes. It is visited ...

20
☐ ... of many tourists.
☐ ... by many tourists.
☐ ... from many tourists.

21. SHE: Jimmy, it´s time you do your homework!
HE: It´s too difficult. I can´t do it.
SHE: Nonsense ...

21
☐ ... Anybody can do it!
☐ ... Any can do it!
☐ ... Some can do it!

---

22. SHE: How does your new secretary speak English?
HE: Her mother is English, you know, so she speaks ...

22
☐ ... good.
☐ ... correct.
☐ ... fluently.

---

23. HE: Why is Mrs Bentley looking for a job?
SHE: She is tired of ...

23
☐ ... works at home.
☐ ... to work at home.
☐ ... working at home.

---

24. HE: Where are you going to-night?
SHE: We´re going to a concert with ...

24
☐ ... ours friends.
☐ ... our neighbours.
☐ ... ours son.

---

25. HE: I found Johnny smoking again this morning. I´m going to punish him.
SHE: Oh, don´t punish him. He´s so small, he must not ...

25
☐ ... punish.
☐ ... punishes.
☐ ... be punished.

---

26. SHE: Can you help me with my English translation?
HE: Why don´t you ask Susan to help you?
SHE: Oh, she seldom helps ...

26
☐ ... nobody.
☐ ... anybody.
☐ ... somebody.

---

27. HE: Does your brother work slowly?
SHE: No, he works ...

27
☐ ... quick.
☐ ... fast.
☐ ... fastly.

---

28. HE: Why don´t you ask your teacher to help you if you can´t do your homework?
SHE: Because I´m ashamed of ...

28
☐ ... being so stupid.
☐ ... be so stupid.
☐ ... to be so stupid.

---

29. HE: Whose umbrella is this?
SHE: I don´t know, but I think it´s ...

29
☐ ... theirs.
☐ ... her.
☐ ... our.

---

30. SHE: How do you spell Shakespeare?
HE: Don´t ask me. I never know how these English names ...

30
☐ ... are spelled.
☐ ... spells.
☐ ... spell.

---

31. SHE: Who are you laughing at?
HE: I´m not laughing at ...

☐ ... somebody.
31 ☐ ... any.
☐ ... anybody.

---

32. SHE: What do you know about Mr Jackson?
HE: Well, I know that he ...

☐ ... is writing good.
32 ☐ ... writes good.
☐ ... writes well.

---

33. HE: What shall I do to speak better English?
SHE: Well, you can learn a lot by ...

☐ ... listen to the BBC.
33 ☐ ... to listen to the BBC.
☐ ... listening to the BBC.

---

34. SHE: Do those horses belong to you?
HE: No, they belong to Mr Crosby, but these ...

☐ ... horses are our.
34 ☐ ... horses are ours.
☐ ... are ours horses.

---

35. SHE: What a beautiful garden. The flowers are so lovely and the grass so green!
HE: That´s because they are often ...

☐ ... water.
35 ☐ ... watered.
☐ ... waters.

---

36. HE: In London there are thousands of good shops.
SHE: You´re lucky. Here in Fordley there are hardly ...

☐ ... some.
36 ☐ ... something.
☐ ... any.

---

37. SHE: Look at this little girl. She is not happy, is she?
HE: No, she is very ...

☐ ... unhappy.
37 ☐ ... unhappily.
☐ ... sadly.

---

38. SHE: Bill is not a polite boy, is he?
HE: Not really. He often leaves without ...

☐ ... say good-bye.
38 ☐ ... to say good-bye.
☐ ... saying good-bye.

---

39. SHE: If you buy a new car, whose car is it?
HE: That´s a stupid question. It is my car, of course.
SHE: No, dear. It´s ...

☐ ... my.
39 ☐ ... mine.
☐ ... my one.

---

40. SHE: Are you very busy?
HE: Yes, it´s five o´clock, and this job must

☐ ... be finished before 6.
40 ☐ ... finishes before 6.
● ... be finish before 6.

41. **HE:** Have we got any whisky at home?
SHE: No, but we've got ...

41
☐ ... anything gin.
☐ ... any gin.
☐ ... some gin.

42. **HE:** What kind of a pupil is Bill?
SHE: Not very good. His written exercises are usually ..

42
☐ ... not well.
☐ ... bad.
☐ ... badly.

43. **SHE:** What's this thing?
HE: This is an electric knife. It's used for ...

43
☐ ... cutting meat.
☐ ... to cut meat.
☐ ... cut meat.

44. **HE:** Peter and his girl-friend have their lunch at a restaurant every day.
SHE: He needs a lot of money then.
HE: Not really. HE pays for HIS lunch and the girl-friend pays for ...

44
☐ ... hers lunch.
☐ ... hers.
☐ ... her.

45. **SHE:** Where do these cigarettes come from?
HE: I think they are all ...

45
☐ ... smuggles from Egypt.
☐ ... smuggling from Egypt.
☐ ... smuggled from Egypt.

46. **SHE:** Can I help you Sir?
HE: I'd like to buy some stamps. Have you got ...

46
☐ ... any?
☐ ... anything?
☐ ... something?

47. **SHE:** Is the 'DRAKEN' a good aeroplane?
HE: I think so. Anyway, it can fly very ...

47
☐ ... quick.
☐ ... fast.
☐ ... rapid.

48. **SHE:** Who are you waiting for?
HE: We are waiting for the vicar. We want ...

48
☐ ... talking to him.
☐ ... talk to him.
☐ ... to talk to him.

49. **HE:** Look at Peter and Paul in that lovely boat. Whose boat is it?
SHE: I don't know. I only know that it's not ...

49
☐ ... theirs boat.
☐ ... their boat.
☐ ... their.

50. **SHE:** Something is wrong with this motor. Do you think you can fix it?
HE: Certainly. It can be ...

50
☐ ... fix in 10 minutes.
☐ ... fixed in 10 minutes.
☐ ... fixes in 10 minutes.

51. SHE: I only made two mistakes in my English exercise.
HE: Good. And Mary? How many mistakes did she make?
SHE: Oh, Mary never makes ...

51
☐... some mistakes.
☐... no mistakes.
☐... any mistakes.

52. SHE: Is John a heavy smoker?
HE: Yes, both he and his wife ...

52
☐... smoke heavily.
☐... smoke heavy.
☐... are smoking heavy.

53. SHE: Our teacher always has a lot of trouble with his car. Can´t he repair it?
HE: No, he is not good at ...

53
☐... repair cars.
☐... repairing cars.
☐... to repair cars.

54. HE: Does the money belong to her?
SHE: No, it belongs to ...

54
☐... he.
☐... his.
☐... him.

55. SHE: Are these Swedish tomatoes?
HE: No, madam. It´s too early for Swedish tomatoes. These ...

55
☐... are imported.
☐... are importing.
☐... imports.

56. HE: I´m terribly hungry. Can I have a sandwich?
SHE: Certainly. What would you like: ham, cheese or salad?
HE: It doesn´t matter. ...

56
☐... Some will be all right.
☐... Something will be all right.
☐... Anything will be all right.

57. SHE: Is Professor Thomson a good speaker?
HE: Yes, he speaks fast, but ...

57
☐... clear.
☐... distinctly.
☐... correct.

58. HE: Why don´t you go to the park to read your book, Mary?
SHE: Because I´m afraid of ...

58
☐... sitting there alone.
☐... to sit there alone.
☐... sit there alone.

59. HE: Does the flat belong to Martin or to Pamela?
SHE: It´s neither his nor hers. In fact it is ...

59
☐... her parents´.
☐... hers parents´.
☐... of hers parents.

60. SHE: Is the new bridge strong?
HE: Yes, it´s made ...

60
☐... by steel.
☐... on steel.
☐... of steel.

A:68

(Answer sheet)

Projektet GUME/Vuxna

Specialkurs i engelska för vuxna

A

svarsblankett

Instruktion

I det här provet kommer du att höra korta dialoger på engelska. Den sista meningen i varje dialog är ofullständig. Markera på svarsblanketten med kryss den riktiga avslutningen på meningen.

Övningsexempel

☐ ... can.
1 ☐ ... do.
☐ ... am.

☐ ... on the village.
2 ☐ ... by the village.
☐ ... in the village.

☐ ... child´s.
3 ☐ ... children.
☐ ... children´s.

Namn:____________________________

Grupp:____________ Datum:__________

(Sample page)

☐ ... some?
1 ☐ ... any?
☐ ... anything?

☐ ... nicely.
2 ☐ ... happily.
☐ ... kind.

☐ ... read.
3 ☐ ... reading.
☐ ... to read.

☐ ... yours.
4 ☐ ... your.
☐ ... your one.

☐ ... by everybody.
5 ☐ ... of everybody.
☐ ... from everybody.

☐ ... any friends.
6 ☐ ... nobody friends.
☐ ... no friends.

☐ ... hardly study.
7 ☐ ... study hardly.
☐ ... study hard.

☐ ... write.
8 ☐ ... writing.
☐ ... to write.

☐ ... they room.
9 ☐ ... their room.
☐ ... theirs room.

☐ ... alcohol serves?
10 ☐ ... alcohol is served?
☐ ... alcohol is serving?

☐ ... some nice.
11 ☐ ... something nice.
☐ ... anything nice.

☐ ... no politely.
12 ☐ ... not politely.
☐ ... not polite.

☐ ... trying.
13 ☐ ... to try.
☐ ... try.

☐ ... her.
14 ☐ ... hers.
☐ ... hers desk.

☐ ... is studied at universities.
15 ☐ ... studies as universities.
☐ ... studied at universities.

☐ ... no left.
16 ☐ ... some left.
☐ ... any left.

☐ ... answers correct.
17 ☐ ... correct answers.
☐ ... correctly answers.

☐ ... collecting stamps.
18 ☐ ... collect stamps.
☐ ... to collect stamps.

☐ ... his.
19 ☐ ... their.
☐ ... your.

☐ ... of many tourists.
20 ☐ ... by many tourists.
☐ ... from many tourists.

Part B of the Achievement Test (Test Booklet)

Markera på svarsblanketten det rätta alternativet med kryss (X).

---

1. This typewriter is so easy to use ('att använda') that
(A) any
(B) somebody
(C) anybody
can write on it.

2. Pamela plays the piano
(A) very well.
(B) very good.
(C) excellent.

3. Mary is shy ('rädd') of
(A) to speak
(B) speaks
(C) speaking
to many people.

4. -"How do you like our dresses?"
-"I like
(A) your one
(B) your
(C) yours
but not Susan's."

5. The gate can
(A) paint
(B) paints
(C) be painted
red if you like.

6. -"I don't want
(A) no
(B) some
(C) any
trouble in this house!"

7. The weather is
(A) awful
(B) terribly
(C) badly
in November.

8. -"I'm tired, Jane. What do you say about
(A) have
(B) to have
(C) having
a rest?"

9. -"If you need a pen, you can use one of
(A) my."
(B) me."
(C) mine."

10. -"All these books
(A) publishes
(B) are published
(C) publish
in England."

11. -"What can we do?"
-"I'm afraid we can do
(A) anything."
(B) something."
(C) nothing."

12. Try to answer all questions
(A) full and correct.
(B) full and correctly.
(C) fully and correctly.

13. -"You are very kind, Dr Allen. I really must thank you for
(A) coming."
(B) to come."
(C) you come."

14. "I must go to the hospital. One of
(A) his
(B) hers
(C) theirs
friends is ill."

15. You must be careful. The question can
(A) be answered
(B) be answering
(C) answers
in two ways.

16. -"I don't think there is
(A) somebody
(B) some
(C) anybody
here who can sing."

17. I know that John studies
(A) hardly,
(B) hard,
(C) intensive,
but he is never tired.

18. Mrs Williams went away ('gick') without
(A) to say
(B) saying
(C) says
goodbye.

19. "This beautiful girl is
(A) a cousin ('kusin') of mine."
(B) one of mine cousins."
(C) a cousin of my."

20. Apple trees can
(A) plant
(B) plants
(C) be planted
in the autumn ('höst').

21. -"What´s the matter with Martin? He hardly says
(A) nothing."
(B) anything."
(C) something."

22. Lennart Hyland can speak
(A) quick.
(B) fast.
(C) fastly.

23. Let´s finish by
(A) sing
(B) to sing "We shall overcome."
(C) singing

24. -"Whose ('Vems') cars are those?"
-"The Hillman is the grocer´s, but the Morris is
(A) our."
(B) ours."
(C) my."

25. -"Do people hunt ('jaga') here?"
-"Yes, wild cats
(A) are hunted
(B) are hunt here in the winter."
(C) hunts

26. Don´t forget to buy
(A) any
(B) some bread.

27. These people visit us
(A) regular.
(B) frequent.
(C) occasionally.

28. -"What were you accused of ('anklagad för')?"
-"I was accused of
(A) take
(B) to take money."
(C) taking

29. -"Does this scooter belong to ('tillhöra') Mr. or Mrs. Hobson?"
-"I think it is
(A) her."
(B) she´s."
(C) hers."

30. Modern boats
(A) are made of
(B) makes of glass fibre.
(C) are made by

31. -"Where can I park my car?"

(A) somewhere."
-"You can park it (B) anywhere."

(A) correct.
32. Father has often visited England, so he speaks English (B) correctly.
(C) good.

(A) steal
33. The policeman arrested the man for (B) stealing a gold watch.
(C) to steal

---

34. -"Are these cars your parents´?"

(A) their."
-"The Morris is my brother´s, but the Austin is (B) theirs."
(C) their one."

(A) by
35. Everybody likes Mary. She is liked (B) of everybody.
(C) with

---

36. -"Are you going away for the weekend?"

(A) somewhere."
-"No, I never go (B) anywhere."

(A) ugly.
37. My mother thinks that Frank´s face is (B) awfully.
(C) terribly.

(A) do
38. I´m afraid of (B) to do this alone ('ensam').
(C) doing

(A) presents are your.
39. Those (B) presents are yours.
(C) are yours presents.

(A) published by
40. -"Are all those books (B) published of Bonniers?"
(C) publish of

41. -"Who is going to win?"

(A) nobody
-"I don´t know. And (B) somebody else ('annan') knows that either ('heller')
(C) anybody

(A) not interestingly.
42. I don´t want to read that book because it is (B) no interesting.
(C) no interestingly.

43. -"You look annoyed ('förargad')."

(A) seeing
-"Yes, I´m annoyed at (B) to see you here."
(C) see

(A) necklace is her?"
44. -"Which (B) is her necklace?"
(C) is hers necklace?"

(A) is serving
45. No wine (B) is served here!
(C) serves

(A) any
46. He came back from the shop without (B) some milk.
(C) no

(A) easy
47. Blackie is very intelligent. He can (B) easily open the door.

48. -"What do you use ('använda') this pen for?"

(A) correct
-"I use it for (B) correcting exercises."
(C) to correct

49. -"Whose are these tennis rackets?"

(A) his."
-"They are (B) her."
(C) our."

(A) is played by
50. Baseball (B) plays by many people in the USA.
(C) plays of

A:75

(Answer sheet)

Namn:____________________________

Grupp:__________ Datum:________

B

svarsblankett

OBS! Markera det rätta alternativet med kryss (X). Sätt ett kryss även om du inte är säker på svaret.

	A	B	C
1	☐	☐	☐
2	☐	☐	☐
3	☐	☐	☐
4	☐	☐	☐
5	☐	☐	☐
6	☐	☐	☐
7	☐	☐	☐
8	☐	☐	☐
9	☐	☐	☐
10	☐	☐	☐
11	☐	☐	☐
12	☐	☐	☐
13	☐	☐	☐
14	☐	☐	☐
15	☐	☐	☐
16	☐	☐	☐
17	☐	☐	☐
18	☐	☐	☐
19	☐	☐	☐
20	☐	☐	☐

	A	B	C
21	☐	☐	☐
22	☐	☐	☐
23	☐	☐	☐
24	☐	☐	☐
25	☐	☐	☐
26	☐	☐	
27	☐	☐	☐
28	☐	☐	☐
29	☐	☐	☐
30	☐	☐	☐
31	☐	☐	
32	☐	☐	☐
33	☐	☐	☐
34	☐	☐	☐
35	☐	☐	☐

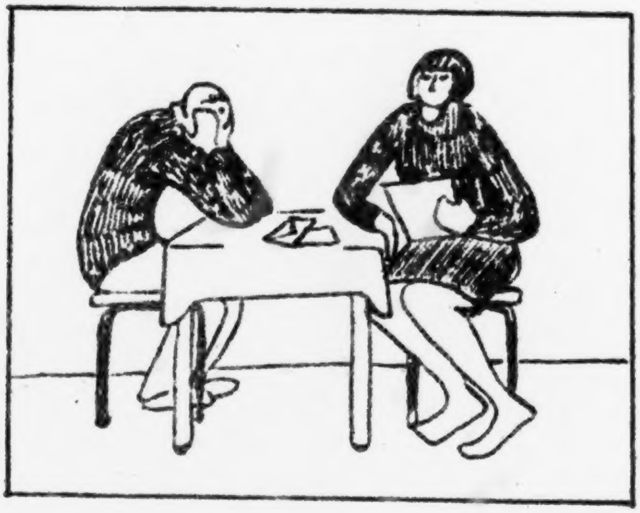
	A	B	C
36	☐	☐	
37	☐	☐	☐
38	☐	☐	☐
39	☐	☐	☐
40	☐	☐	☐
41	☐	☐	☐
42	☐	☐	☐
43	☐	☐	☐
44	☐	☐	☐
45	☐	☐	☐
46	☐	☐	☐
47	☐	☐	
48	☐	☐	☐
49	☐	☐	☐
50	☐	☐	☐

Part C of the Achievement Test

C

Instruktion

Fyll i luckorna med de engelska ord som fattas.



JIM: Are all those letters ....?
('dina')

SUE: Yes, ... they are .... You never write to
('naturligtvis') ('mina')

....
('någon')

JIM: Well, I can´t spell ...., so I´m afraid of ....
('korrekt') ('att skriva')

SUE: Nonsense. .... can write a letter.
('Vem som helst')

JIM: And the letters must ...., too.
('postas')

SUE: If you spell so ...., why don´t you ask me ?
('dåligt')

I´m not so bad at ...., you know. And don´t
('att stava')

forget: all letters must .... !
('besvaras')

Instruktion

Översätt de svenska meningarna till engelska. En del är redan färdigt, så det är bara en del ord ni behöver fylla i. Det är de understrukna orden i de svenska meningarna som ni skall översätta till engelska.

1.	Köp inte någonting idag.	*Don't buy .... today.*
2.	Frank Sinatra sjunger bra.	*Frank Sinatra sings ....*
3.	John är rädd för att läsa högt.	*John is shy of .... aloud.*
4.	Din födelsedag är på samma dag som min.	*......... birthday is on the same .... as ....*
5.	Doktorns gamla hus måste målas.	*The doctor's .... house must ....*
6.	Du kan köpa boken i vilken affär som helst längs den här gatan.	*You can buy .... in .... shop along this ....*
7.	Det var mycket vackert! Jag önskar att jag kunde sjunga lika vackert som du kan.	*That's .... beautiful! I wish I could sing as .... as you can.*
8.	Mrs Williams tackade mig för att jag kom.	*Mrs Williams thanked me for ....*
9.	Den här fåtöljen är äldre än din.	*This .... is older than ....*
10.	Paris besöks av många svenskar varje år. (besöka = to visit)	*Paris .... many Swedes every year.*

A:78

D

Part D of the Achievement Test. Tapescript

Manus
till

MUNTLIGT PROV

Teckenförklaring:

///// = paus
=== = ljudsignal
( ) = ej med på bandet

Nu skall du få vara med om en övning i vilken du skall ge muntliga svar på vissa frågor. Du kan alltså lägga undan alla papper och pennor och bara lyssna. Jag hoppas att ni hör bra det som sägs och att ni inte har några andra problem heller. Vi skall i alla fall be er lärare att stoppa bandspelaren, så att ni kan säga till om det är något som inte fungerar.

(Bandspelaren stoppas)

(DEL I)

Sådär, ja. Du skall nu få höra några meningar på engelska. En del av dem är riktiga och en del är det något fel i. Jag skall be dig att efter varje mening säga om den är rätt eller fel. Är den riktig säger du "RIGHT" och om den är fel säger du "WRONG". Du kommer att höra en ljudsignal omedelbart före varje mening, och vi börjar med ett övningsexempel. Är den här meningen "RIGHT" eller "WRONG"?

I lives in Sweden. ///// ===

Efter den meningen säger man "WRONG" eftersom det inte skall vara något 's' på live. Det heter ju:

I live in Sweden.

Nu är det din tur. Säg alltså "RIGHT" om meningen är riktig och "WRONG" om den är felaktig. Du måste svara innan du hör ljudsignalen. Här kommer den första:

(Rätt svar)

(1) *Are you afraid of to swim in the sea?* ///// === (wrong)
(2) *This is my book and that one is your.* ///// === (wrong)
(3) *Mary is often helped of her friends with problems.* //// === (wrong)
(4) *You must be carefully when you cross a street.* ///// === (wrong)
(5) *Don't go without to say good-bye.* ///// === (wrong)
(6) *I like our dog but not theirs.* ///// === (right)
(7) *My sister always reads quickly.* ///// === (right)
(8) *Pat is not interested in to do the housework.* ///// === (wrong)
(9) *I like people that are politely.* ///// === (wrong)
(10) *I am not ashamed of saying this.* ///// === (right)

(DEL II)

Och nu skall vi gå över till bildhäftet. Slå upp sidan 1. /////
Du kommer att få höra engelska meningar som gäller bilderna, och du skall avgöra om det som sägs om bilden är riktigt eller felaktigt. Är det riktigt säger du "Right" och är det fel säger du "Wrong". Vi börjar med ett övningsexempel. Titta på den översta bilden, där det står EXAMPLE. Lyssna samtidigt på den här meningen och säg om den är "Right" eller "Wrong":

The girl is giving the boy a book. /////

Ja den måste vara "Wrong" eftersom det är pojken som ger flickan en bok.
Lyssna på nästa och säg "Right" eller "Wrong":

The boy is giving the girl a book. /////,

Här skulle ni säga "Right". Den meningen är riktig.
Kom ihåg att svara innan nästa ljudsignal kommer, annars räknas inte svaret.

Och titta nu på bild nummer 1. Bilden som föreställer en flicka som läser flitigt i sitt rum. Lyssna noga och svara med "RIGHT" eller "WRONG" efter varje mening.

(11) *Susan hardly studies in her room.* ///// === (wrong)
(12) *Susan is studying hard in her room.* ///// === (right)

Bild nummer 2. Titta alltså på bilden med det ensamt lekande barnet på.

(13) *Pat hasn't got anybody to play with just now.* ///// === (right)
(14) *Pat hasn't got anything to play with just now.* ///// === (wrong)
(15) *Pat has got nobody to play with just now.* ///// === (right)

Bild nummer 3. Här har vi också ett lekande barn på bilden, men dessutom ser vi en hund som tittar på barnet.

(16) *The child is watched by the dog.* ///// === (right)
(17) *The dog is watching the child.* ///// === (right)
(18) *The child is watching the dog.* ///// === (wrong)

Titta på nästa bild, bild nummer 4.

(19) *A puncture mends the garage owner.* ///// === (wrong)
(20) *The garage owner is mended by a puncture* ///// === (wrong)
(21) *The garage owner is mending a puncture.* ///// === (right)

Bild nummer 5. Lägg märke till att murarens namn är Wood.

(22) *This wall is made of wood.* ///// === (wrong)

(23) *This wall is made by Wood.* ///// === (right)

Och så sista bilden på denna sida, bild nummer 6.

(24) *There are many oranges, but there are hardly any bananas on the table.* ///// === (right)

(25) *There are hardly any oranges, but there are some bananas on the table.* ///// === (wrong)

(26) *There are many oranges, but there aren't any bananas on the table.* ///// === (wrong)

Vänd blad. Sida 2.

(DEL III)

I nästa del får du göra lite annorlunda. Här har vi två eller tre bilder till varje mening. Du kommer att höra ett antal påståenden, men den här gången skall du inte säga om det är riktiga eller felaktiga påståenden, utan vilken av bilderna som avses med meningen. Ditt svar skall vara antingen NUMBER ONE, NUMBER TWO eller NUMBER THREE. Svara innan signalen kommer.

Det är inte säkert att det är en mening till varje bild. Det kan vara så att två meningar hör till samma bild.

Vi fortsätter med övningen direkt. Titta på bildserien nummer 7. ///// Det är alltså bilderna med busshållplatsen på. Lyssna noga och ange efter varje mening om den stämmer överens med "NUMBER ONE", "NUMBER TWO" eller "NUMBER THREE".

(27) *Somebody is waiting at the bus stop.* ///// === (number 2)
(28) *There aren't any people at the bus stop.*///// ===(number 1)
(29) *I can see some people waiting for the bus.* ///// === (number 3)

Bildserie nummer 8. Bilderna med vasen och blomman.
(30) *There's no water in the vase.* ///// === (number 3)
(31) *There isn't any water in the vase.* ///// === (number 3)
(32) *There is hardly any water in the vase.* ///// === (number 2)

Bildserie nummer 9. Här har vi bara två bilder, den ena föreställer en mycket lätt fråga, och den andra en mycket svår fråga.

(33) *Anybody can answer this question quickly.* ///// === (number 1)
(34) *Hardly anybody can answer this question quickly.* ///// === (number 2)

Bildserie nummer 10. Näst sista bildserien på denna sida.
(35) *Nobody can do this.* ///// === (number 2)
(36) *I don't think anybody can do this.*///// === (number 2)
(37) *I think anybody can do this.* ///// === (number 3)

Bildserie nummer 11. Sista bildserien. Och du ser där Simon Templar eller Helgonet som han också kallas.
(38) *Simon Templar follows the girl.* ///// === (number 3)
(39) *The girl is followed by Simon Templar.* ///// === (number 3)
(40) *Simon Templar is followed by the girl.* ///// === (number 1)

Vänd blad. Slå upp sida 3.

(DEL IV)

Vi fortsätter med ett avsnitt där du skall komplettera några meningar. Den engelske läraren ställer en fråga och besvarar den själv, men inte helt. Han utelämnar antingen sista eller näst sista ordet. I stället för det ordet får du höra den här ljudsignalen: === Din uppgift är att upprepa hela svarsmeningen men så att du fyller i även det ord som fattas. Det är alltid ett så kallat possessivt pronomen, d v s ett ord som MY, MINE, HIS, osv. Du måste använda ett sådant ord, och inte något namn.

Här kommer ett exempel. Titta på bild nummer 12, lyssna på frågan och svaret som följer:

Is this father's room? No, it isn't === room.

Här skall du upprepa och samtidigt komplettera svaret. Du skall alltså säga:

No, it isn't his room.

Lägg märke till att du inte skall använda namnet, eller substantivet, utan det lämpliga ordet för HANS, HENNES, DERAS, osv.

Vi tar exemplet en gång till och den här gången får du upprepa det rätta svaret utan hjälp:

Is this father's room? No, it isn't === room. /////

Ja, jag hoppas du har utnyttjat pausen för ett fullständigt svar.

Då fortsätter vi. Samtliga frågor i det här avsnittet gäller samma bild, bild nummer 12 som föreställer en barnkammare och några ungdomar.

(41) *Is that Peter's car? Yes, it's === car.*///// === ...his...
(42) *Is the aeroplane Peter's, too? No, it is not ===.* ///=== ...his.
(43) *Is the house Tommy's and Peter's? No, it isn't ===.* ///=== ...theirs.
(44) *Does the football belong to the boys? Yes, it's === football.* ///// === ... their...
(45) *Is the horse Mary's? No, it can't be ===.* ///// === ...hers.
(46) *Is Blackie Betty's dog? Yes, it is === dog.* /////=== ...her...
(47) *What's Mary playing with? She's playing with === cat.*/////=== ...her.
(48) *Are these children yours? No, they are not ===.*/////=== ...mine/ours/yours...

Och där var denna övningen slut.

(DEL V)

I nästa övning skall vi fortfarande använda sidan 3, bild nummer 13. På bild nr 13 ser du Prince Philip, som sägs vara skicklig polospelare. Det sägs också att många engelsmän inte är särskilt glada över att drottningens man spelar polo på söndagar.
Här vill vi att du svarar på frågor. Du får höra frågorna och sedan börjar vår engelske lärare med svaret, men avslutar det inte helt. Det blir ibland flera ord som skall fyllas i. Vi gör som förut. Du upprepar svaret och fyller i de ord som fattas. Svaren måste vara fullständiga och inte av typen "Yes, it does" eller "No, it isn´t". Det blir inga exempel nu, men det går säkert bra ändå. Pausen är inte så lång, men den räcker. Säg ingenting efter ljudsignalen som följer efter pausen.
Titta på bild nummer 13.

(49) *What is Prince Philip interested in?*
He is interested in ... ///// === (... playing polo.)

(50) *How does he play polo?*
He plays polo ... ///// === (.../very / well.)

(51) *Do you think his horse is slow?*
No, the horse must be ... ///// === (fast/quick.)

(52) *How does the horse run?*
The horse runs ... ///// === (... fast/quickly.)

(53) *Is he riding the Queens horse?*
No, he is riding... ///// === (... his/own/horse.)

(54) *Do you think Prince Philip goes to church on Sundays?*
No, I think he plays polo instead of ... ///// ===
(... going to church.)

Vänd blad. Slå upp sidan 4.

(DEL VI)

Vi går ett steg längre. I denna avdelning får du höra meningar på svenska som du skall översätta till engelska. Vår engelske lärare börjar med en del av översättningen, men resten får du fylla i själv. Du får t ex höra:

Jag kan tala engelska.

Engelsmannen börjar översätta:

I can ...

Men han avslutar inte meningen, utan det får du göra. Upprepa det som engelsmannen har sagt och fyll i det som fattas. Du säger alltså:

I can speak English.

Vi gör exempelmeningen en gång till.

Jag kan tala engelska.
I can ... ///// ===

Ja, jag hoppas, att du utnyttjade pausen och översatte hela meningen. Då börjar vi med översättningsövningen.

(55) *Jag är trött på att arbeta hemma.*
I'm tired of ... ///// === (...working at home.)
(56) *Jag träffar aldrig några människor.*
I never meet ... ///// === (... any people.)
(57) *Min man är inte förtjust i att prata med mig.*
My husband is not fond of ... ///// === (...talking to me.)
(58) *Han lagar aldrig någonting.*
He never mends ... ///// === (... anything.)
(59) *Men alla våra gamla saker måste lagas.*
But all our old things must ...///// === (... be mended.)
(60) *Han är dålig på att laga saker.*
He is bad at ... ///// === (mending things.)
(61) *Allting måste lagas av mig.*
Everything must be mended... ///// === (... by me.)
(62) *Men hans vänner säger att han arbetar bra.*
But his friends say that he ... ///// === (works well.)
(63) *Han gör allting fort.*
He does everything ... ///// === (... fast/quickly)
(64) *Jag vill ha ett jobb i stället för att arbeta hemma.*
I want to have a job instead of... ///// === (working at home.)
(65-66) *Jag är säker på att vilket jobb som helst är lättare än mitt.*
I'm sure that ... ///// === (... any job is easier than mine.)

(DEL VII)

Och det var den övningen. Den sista övningen är fortfarande på sidan 4 i bildhäftet. Bild nr 15. Titta på bild 15. Där ser du en bild från en ishockeymatch som spelas mellan Kanada och Sverige. Det är en spännande match som ses av många människor. Det svenska laget är bra på att spela.

Vi ska nu be er att säga någonting om den här bilden. Du måste använda bl a följande ord (observera att orden står under bilden):

good at, played, quick, is watched

Berätta alltså lite om vad du kan se på bilden och använd de angivna orden. Varsågoda och börja.

/////

Och det var den sista övningen. Hoppas att de här olika övningarna har gett dig en del.

(The Students' Booklet to Part D) A:87

SKRIV INGENTING I DETTA HÄFTE

Bildserie
till
MUNTLIGA ÖVNINGAR
i inlärningsstudio

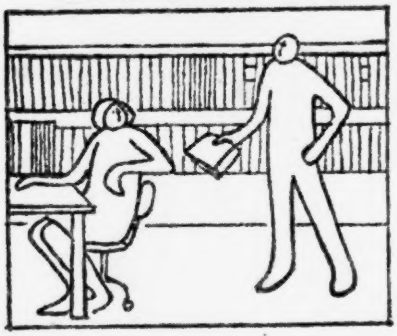
ILLUSTRATIONER:

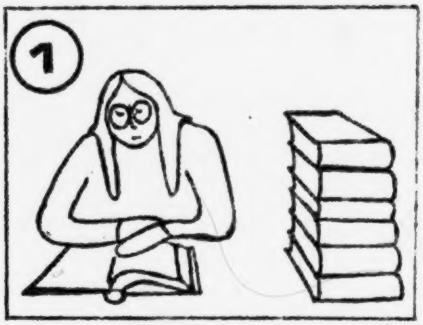
LISA ÖRTENGREN

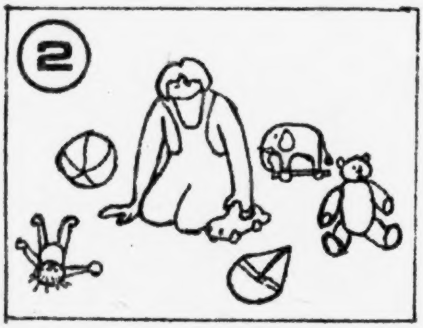
Vänd ej blad förrän Du blir tillsagd

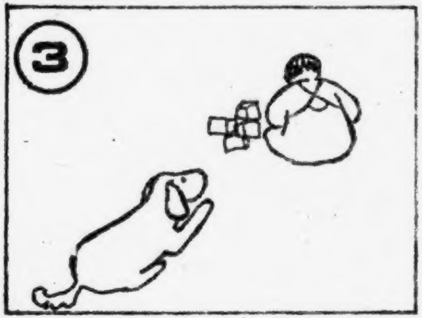
Right? Wrong?

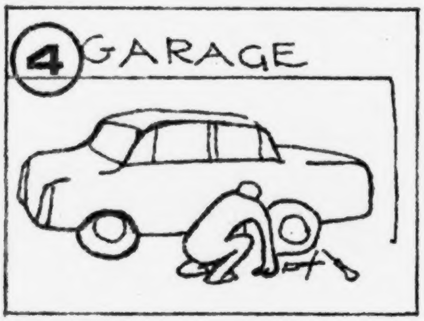
EXAMPLE

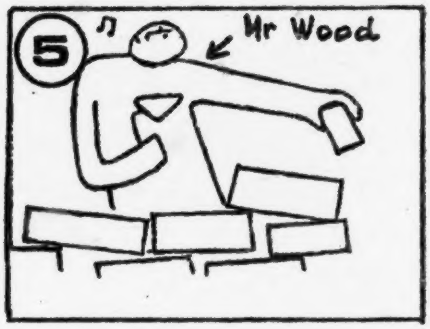


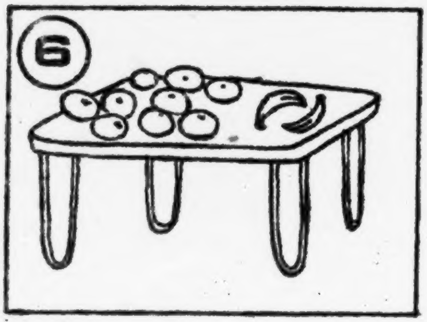






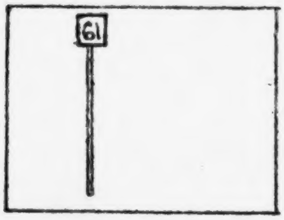






Number one? Number two? Number three?

⑦



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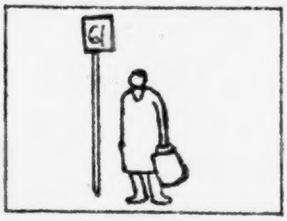
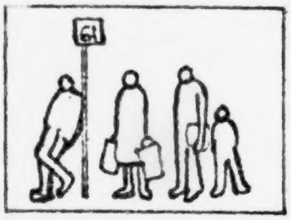
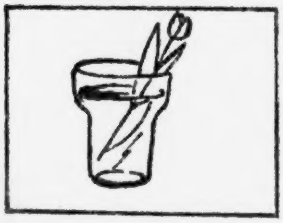


Number two



Number three

⑧



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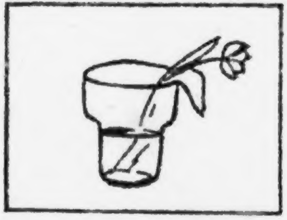

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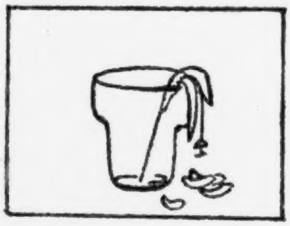


Number three

⑨

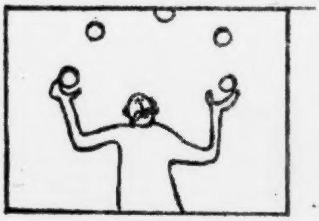
$$5 + 5 = ?$$

Number one

$$\frac{\sqrt{86347 \times 6542}}{2\pi} = ?$$

Number two

⑩



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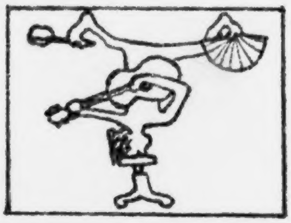

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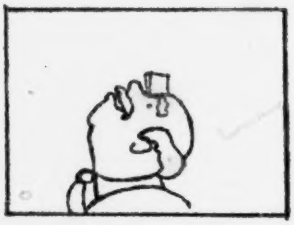
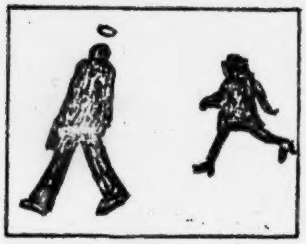
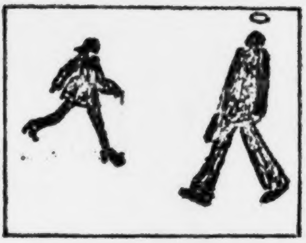


Number three

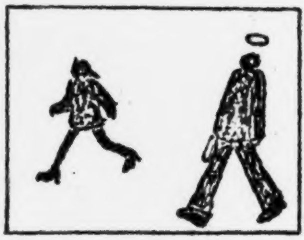
⑪



Number one

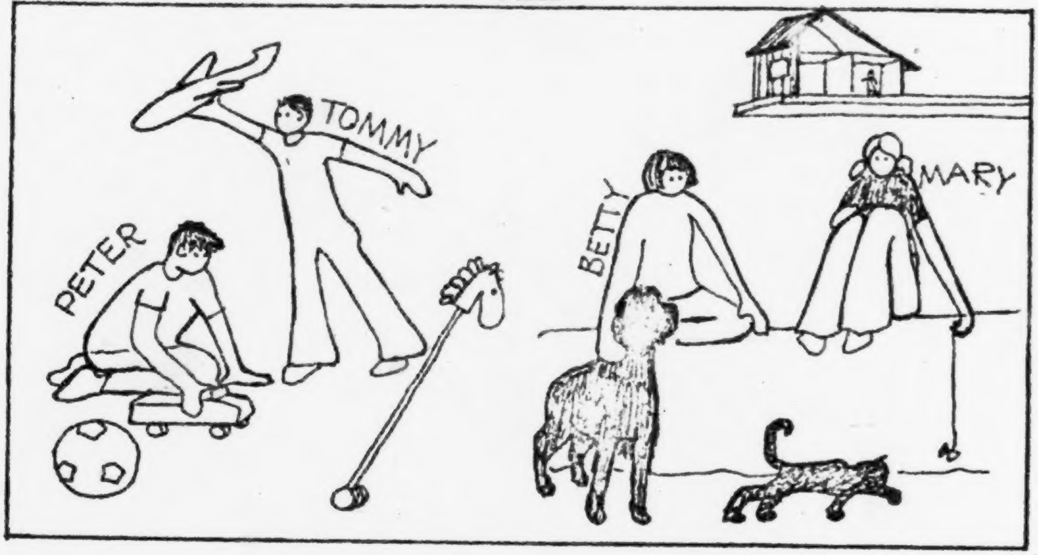


Number two

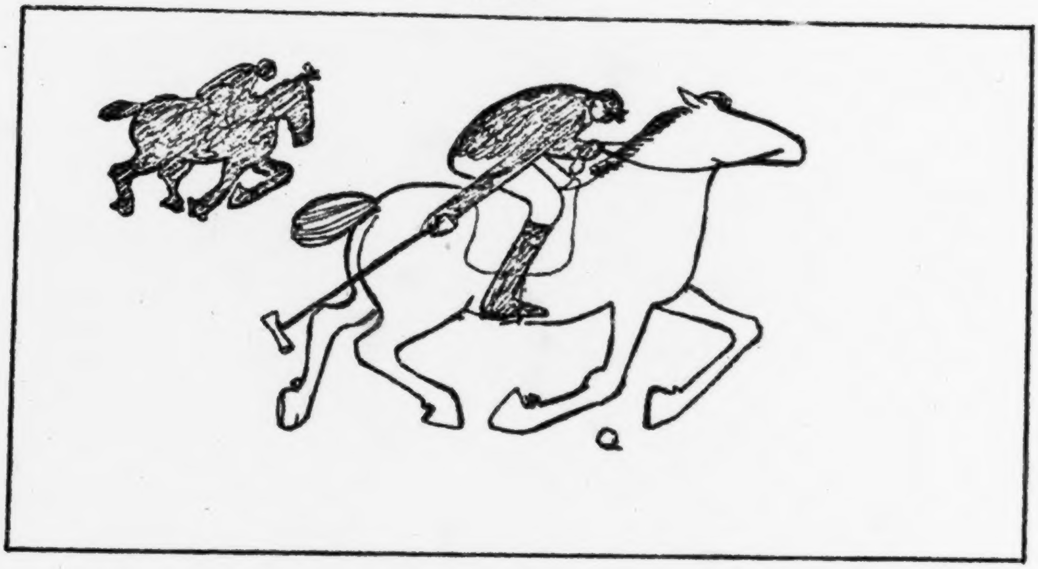


Number three

12

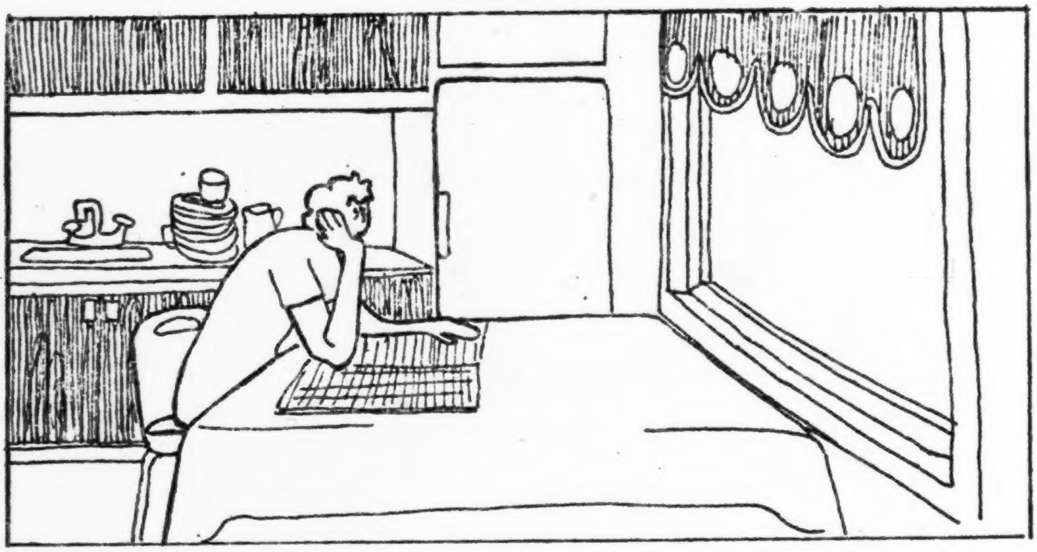

TOMMY
PETER
BETTY
MARY

13

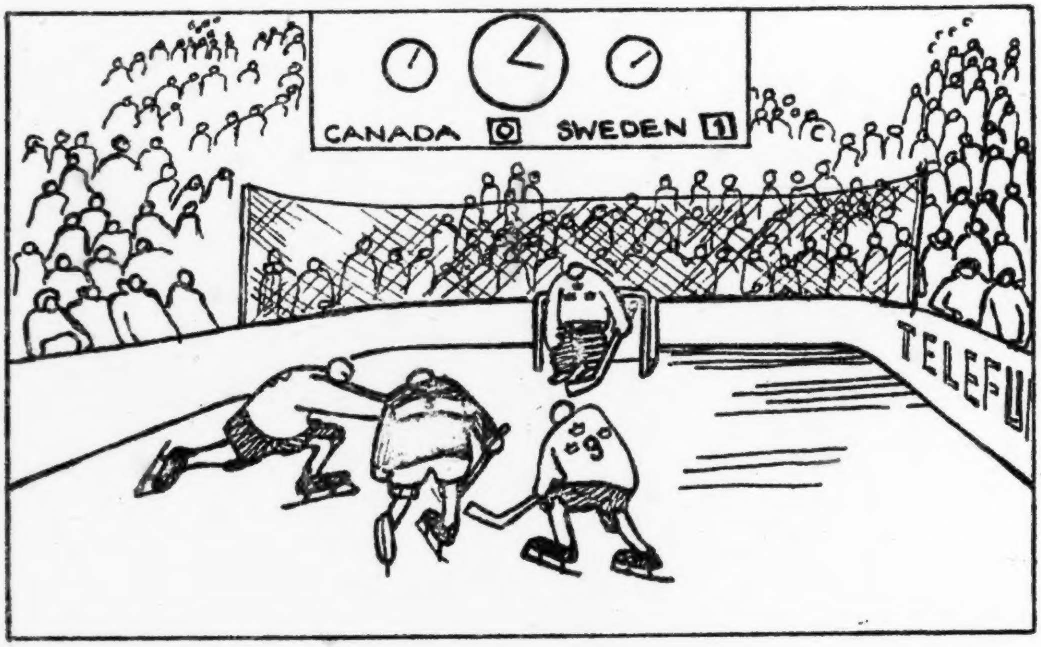


to play polo = att spela polo

14



15


CANADA 0 SWEDEN 1
TELEFU

good at played quick is watched

The Attitude Test

Projektet GUME/Vuxna
Specialkurs i engelska för vuxna

Kursvärdering

Vi skulle vilja veta vad Du tycker om den specialkurs som Du nu varit med om. Vi är tacksamma om Du ville besvara alla frågorna. Om Du har synpunkter utöver dem som tas upp i frågorna, så är Du välkommen med Din kritik (både positiv och negativ) samt eventuella förslag till förbättring av kursen på sista sidan.

OBS! Frågorna gäller SPECIALKURSEN och inte den vanliga undervisningen som Din lärare ger.

A. I denna avdelning vill vi ha Ditt omdöme om kursen i sin helhet.

1. Specialkursen i sin helhet tyckte jag var

( ) mycket värdefull
( ) ganska värdefull
( ) varken bra eller dålig
( ) ganska värdelös
( ) helt värdelös

2. Lektionerna (eller de flesta av dem) tyckte jag var

( ) mycket roliga
( ) ganska roliga
( ) varken roliga eller tråkiga
( ) ganska tråkiga
( ) mycket tråkiga

3. Kursens svårighetsgrad. För mig var specialkursen

( ) mycket för svår
( ) lite för svår
( ) lagom
( ) lite för lätt
( ) mycket för lätt

4. Skulle Du rekommendera att kursen i denna form (eller obetydligt förändrad form) ingick i andra Engelska 1 kurser?

( ) Ja, absolut
( ) Ja, kanske
( ) Vet ej
( ) Nej, kanske inte
( ) Nej, absolut inte

5. Tycker Du att specialkursen borde finnas tillgänglig för självstudier? (I så fall skulle häftena finnas att köpa, bandinspelningarna att låna och projektionsmaterialet skulle ingå i paketet som ett extra häfte).

( ) Ja, absolut
( ) Ja, kanske
( ) Vet ej
( ) Nej, kanske inte
( ) Nej, absolut inte

6. Hur tror Du att kursen skulle ha blivit om det hade varit läraren själv som lett lektionerna i stället för bandspelaren? Kursen skulle ha blivit

( ) mycket bättre
( ) lite bättre
( ) lika bra/dålig
( ) lite sämre
( ) mycket sämre

7. Min inställning förändrades under specialkursens lopp på följande sätt:

( ) Jag blev mer och mer positiv
( ) Min inställning ändrades inte
( ) Jag blev mer och mer negativ

B. I denna avdelning vill vi ha Ditt omdöme om kursens olika detaljer.

8. Dialogerna tyckte jag var

(a)

( ) mycket för svåra
( ) lite för svåra
( ) lagom svåra
( ) lite för lätta
( ) mycket för lätta

(b)

( ) mycket bra
( ) ganska bra
( ) varken bra eller dåliga
( ) ganska dåliga
( ) mycket dåliga

9. De skriftliga övningarna tyckte jag var

(a)

( ) mycket för svåra
( ) lite för svåra
( ) lagom svåra
( ) lite för lätta
( ) mycket för lätta

(b)

( ) alldeles för många
( ) lite för många
( ) lagom många
( ) lite för få
( ) alldeles för få

10. Körläsning förekom under lektionerna

( ) alldeles för mycket
( ) något för mycket
( ) i lagom utsträckning
( ) något för lite
( ) alldeles för lite

11. Jag tycker de muntliga 'drillövningarna' var

(a)

( ) mycket svåra
( ) någor svåra
( ) varken svåra eller lätta
( ) ganska lätta
( ) mycket lätta

(b)

( ) alldeles för många
( ) något för många
( ) lagom många,
( ) något för få
( ) alldeles för få

12. Hur pass effektiva anser Du att 'drillövningarna' är när man lär sig engelska?

( ) Mycket effektiva
( ) Ganska effektiva
( ) Svårt att säga
( ) Inte särskilt effektiva
( ) Inte alls effektiva

13. Jag tycker att 'drillövningarna' kan

( ) helt o. hållet ersättas av förklaringar av grammatik
( ) delvis ersättas av förklaringar
( ) behållas i nuvarande utsräckning
( ) utökas lite grand
( ) utökas väsentligt

B. I denna avdelning vill vi ha Ditt omdöme om kursens olika detaljer.

8. Dialogerna tyckte jag var

(a)	(b)
( ) mycket för svåra	( ) mycket bra
( ) [✓ lite för svåra]	( ) ganska bra
( ) lagom svåra	( ) varken bra eller dåliga
( ) lite för lätta	( ) ganska dåliga
( ) mycket för lätta	( ) mycket dåliga

9. De skriftliga övningarna tyckte jag var

(a)	(b)
( ) mycket för svåra	( ) alldeles för många
( ) lite för svåra	( ) lite för många
( ) lagom svåra	( ) lagom många
( ) lite för lätta	( ) lite för få
( ) mycket för lätta	( ) alldeles för få

10. Körläsning förekom under lektionerna

( ) alldeles för mycket
( ) något för mycket
( ) i lagom utsträckning
( ) något för lite
( ) alldeles för lite

11. Jag tycker förklaringarna var

(a)	(b)
( ) mycket svåra	( ) alldeles för många
( ) något svåra	( ) något för många
( ) varken svåra eller lätta	( ) lagom många
( ) ganska lätta	( ) något för få
( )mycket lätta	( ) alldeles för få

12. Hur pass effektiva anser Du att förklaringar av grammatik är när man lär sig engelska?

( ) Mycket effektiva
( ) ganska effektiva
( ) Svårt att säga
( ) Inte särskilt effektiva
( ) Inte alls effektiva

13. Jag tycker att förklaringarna kan

( ) helt o. hållet ersättas av muntliga övningar
( ) delvis ersättas av muntliga övningar
( ) behållas i nuvarande utsträckning
( ) utökas lite grand
( ) utökas väsentligt

14. Vad som var bra med specialkursen var

15. Vad som var dåligt med specialkursen var

16. Andra synpunkter, förslag osv.

C. Allmänna frågor.

17. Visserligen sades det i början av kursen att ni inte skulle läsa på hemma, men Du har kanske varit nyfiken och läst på ändå. Svara därför på följande:

( ) Ja, jag har läst på mycket noggrant.
( ) Ja, jag har läst på ganska regelbundet
( ) Jag har läst på några gånger.
( ) Jag har nästan inte läst någonting.
( ) Jag har inte läst på en enda gång.

18. Jag läser engelska

( ) enbart för nöjets skull
( ) dels för att det är roligt, dels för att det är nyttigt
( ) bara för att jag är tvungen att läsa engelska på grund av

----
(ange orsak, t. ex. fortsatta studier, meritering i arbetet och dyl.)

19. Min inställning till språk (i synnerhet engelska) är följande

( ) jag tycker det är mycket roligt med språk
( ) jag tycker det är ganska roligt med språk
( ) jag tycker inte det är särskilt roligt med språk
( ) jag tycker inte alls det är roligt med språk

Nu är specialkursen slut.

( ) Tack och lov!

( ) Så synd!

Namn: ______________________________

Grupp: ___________ Datum: ___________

Translation of the Attitude Test

COURSE EVALUATION

We should like to know what you think about the Special Course you have attended. We should be grateful if you would answer all the questions. If you have viewpoints other than those taken up in the questions, we welcome criticism, both positive and negative, and any suggestions you may have for improving the course. There is space for such views and suggestions on the last page.

Please note! The questions here apply to the SPECIAL COURSE and not to the normal teaching you have.

A. In this section we would like your opinions about the course as a whole

1. I thought the Special Course as a whole was

   of great value/ of some value/ neither good nor bad/ of little value/ of no value

2. I thought the lessons (or most of them) were

   very enjoyable/ fairly enjoyable/ neither enjoyable nor boring/ rather boring/ very boring

3. Standard of difficulty. For me the Special Course was

   much too difficult/ a little too difficult/ just right/ a little too easy/ much too easy

4. Would you recommend that the course in its present form (or with only minor changes) be included in other English 1 courses?

   Yes, absolutely/ Yes, perhaps/ Don't know/ No, perhaps not/ No, absolutely not

5. Do you think the Special Course should be made available for self-instruction? (In which case the work-books could be bought, the recordings borrowed and the projector materials would be included as an extra manual).

   Yes, absolutely/ Yes, perhaps/ Don't know/ No, perhaps not/ No, absolutely not

6. What do you think the course would have been like if the teacher had taught the lessons himself instead of these being recorded. The course would have been

   much better/ a little better/ just as good/bad/ a little worse/ much worse

7. During the Special Course my attitude changed in the following way:

   I became more and more positive/ My attitude did not change/ I became more and more negative

B. In this section we would like your opinions about different parts of the course

8. I thought the dialogues were

   a) much too difficult/ a little too difficult/ of right standard of difficulty/ a little too easy/ much too easy
   b) very good/ fairly good/ neither good nor bad/ rather bad/ very bad

9. I thought the written exercises were

   a) much too difficult/ a little too difficult/ of right standard of difficulty/ a little too easy/ much too easy
   b) far too many/ a little too many/ the right number/ a little too few/ far too few

10. There was

    far too much/ a little too much/ just the right amount of/ somewhat too little/ far too little

    reading in chorus during the lessons

11. I think the oral drill exercises (explanations) were

    a) very difficult/ somewhat difficult/ neither difficult nor easy/ rather easy/ very easy
    b) far too many/ somewhat too many/ the right number/ somewhat too few/ far too few

12. How effective do you think drill exercises (explanations) are when learning English?

    very effective/ fairly effective/ difficult to say/ not very effective/ not effective at all

13. I think that the drill exercises can

    be replaced entirely by explanations of grammar/ be partly replaced by explanations/ be kept to their present extent/ be increased a little/ be increased very much

    (I think that the explanations can be replaced entirely by drill exercises etc.)

14. What was good about the Special Course was:

15. What was bad about the Special Course was:

16. Other viewpoints, suggestions etc.:

C. General questions

17. Although you were told at the beginning of the course not to follow up the lessons at home, you probably were curious and did some work anyway. Therefore answer the following:

    Yes, I have done a lot of work/ Yes, I have done some work fairly regularly/ I have done some work a few times/ I have hardly done any work/ I have not done any work at all

18. I am studying English

    only for pleasure/ both because I enjoy it and because it is useful/ only because I have to for the following reason/s/: (give reason/s/, e.g. for continued studies, for my work etc.)

19. My attitude towards languages (especially English) is as follows

    I very much enjoy studying languages/ I quite like studying language/ I do not enjoy studying languages very much/ I do not like studying languages at all

20. Now the Special Course is over

    Thank goodness!
    What a pity!

A:100

The Term Test

Prov på LET'S LOOK IN

(Poäng:)

Namn: ____________________

Grupp: ____________________

I. Vad heter följande på engelska:

kvinna	____________	varför	____________
arbete	____________	dansa	____________
smör	____________	bror	____________
mat	____________	genast	____________
allting	____________	kyrka	____________
snart	____________	fullständig	____________
svart	____________	ägare	____________
söndag	____________	kläder	____________
sedan	____________	hel	____________
glad	____________	törstig	____________

II. Översätt till engelska:

1. Jag hoppas jag kan hjälpa dig. = ____________________
2. Det är redan sent. = ____________________
3. Susan måste diska varje dag. = ____________________
4. Kom inte för sent! = ____________________
5. Tycker du om vitt bröd? = ____________________
6. Pappa lagar middag. = ____________________
7. Mamma lagar en punktering. = ____________________

III. Answer these questions in English:

1. What do you call the meal (=måltid) you have in the morning?
____
____
2. What is a sale? ____________________
____
3. What are the different parts of a car? ____________________
____
____
____

(Prov på Let's Look In, forts.)

IV. Blandade uppgifter

a) Ändra till frågor:

1. Bob must stay at home. ....

2. You often go for a walk. ....

3. They have got a new boat. ....

4. The hat suits me. ....

b) Ändra till nekade satser:

5. The battery needs recharging. ....

6. My dog likes sugar. ....

7. They make good tea. ....

8. You may smoke here. ....

c) Ändra till imperfekt (då-tid):

9. I like him very much. ....

10. He never walks to his job. ....

11. Are you busy? ....

12. I hope to find a good bargain. ....

d) Ändra till plural:

13. A child likes chocolate. ....

14. This girl is very nice. ....

15. My teacher lives in Göteborg. ....

16. The train doesn't stop here. ....

APPENDIX 4

The Swedish School System

(This is an abridged version of a stencil with the same title issued by the information service of the National Swedish Board of Education).

9-year Compulsory School

The 9-year compulsory school was introduced in Sweden in 1962.

After eight years of the curriculum, a new, or rather revised curriculum is due to come into force as from the autumn term 1970. This curriculum represents an amplification of its predecessor.

The 9-year compulsory school is divided into three departments - the lower, middle and upper departments. Children start school the year they have their seventh birthday.

The new curriculum contains certain innovations as regards both subjects and teaching methods. Obligatory English now starts in grade 3, continuing throughout the school.1)

No examinations are set in the 9-year compulsory school. Marks are awarded according to a 1-5 scale, with 5 as the highest award. Pupils completing their studies in the 9-year compulsory school are entitled to apply for admission to gymnasium irrespective of the options they have chosen in the upper department.

The 9-year compulsory school is a municipal organization.

Upper Secondary Schools

Every year about 85 per cent of sixteen-year-olds opt to continue their studies immediately after finishing the 9-year compulsory school. They can go on to one of three forms of upper secondary schools: gymnasium, continuation school or vocational school. The gymnasium comprises five lines: humanities, social sciences, economics, natural sciences and technology. The normal duration of studies is three years. The continuation school is a new, two-year school form which was regularized in 1966 after two years' existence on an experimental footing. The continuation school comprises three lines, social, economic, and technical. Continuation school is more career-oriented than gymnasium. The third type of upper secondary schools is known as the vocational school. Training is provided for a large variety of trades in industry, handicraft, commerce and clerical work, nursing and welfare and other sectors. Courses vary from a single term to several years.

1) Some more information on the new curriculum will be given on page

The New Gymnasial School

Starting in the school year 1971/72, gymnasium, continuation school and vocational school are to be fused into a single organization known as the gymnasial school. The introduction of the gymnasial school is above all an organizational reform. The merger will make it possible for more intensive use to be made of premises and equipment, as well as making it easier for students to change their course of studies if they wish.

Adult Education

Adult education in Sweden has expanded rapidly during the last few years. There have been two reasons for this expansion. The first of these was concerned with social justice or reform, the aim being to enable the many adults whose education had been confined to compulsory elementary school (often no more than 6 or 7 years) the chance to improve their educational status. The second reason lay in the great need for better-educated adults. A distinction is generally drawn between three kinds of adult education: qualifying adult education, labour market training and leisure-time studies. The boundaries between these categories are not always distinct.

Municipal Adult Education is a new form of qualifying adult education inaugurated in 1968 and based on the curricula laid down for the upper department of the 9-year compulsory school, gymnasium, continuation school and vocational school. Adults wishing to study can read one or two subjects at a time and so, if they wish, accumulate the full leaving merits of the school form they have chosen. Most courses are held in the evening, but lessons are also held during the day in some places. Adult education facilities of this kind are generally provided in ordinary municipal schools, which also provide the teachers. The minimum ages for admission are 16 for the 9-year compulsory school courses and 18 for other courses. Instruction is free of charge.

The most extensive adult educational facilities are those provided by the pupular education movements, whose study circles (numbering 150 000 annually) are attended by about 1.5 million people every year. The Folk High Schools are a typical Scandinavian institution of more than a hundred years' standing in Sweden. There are 115 Folk High Schools, most of them residential. The aim is to provide an all-round education, but most of their students wish to acquire a basis for further education. The subjects taught are often the same as in the 9-year compulsory school or gymnasium, but their content is generally different, being more adapted to suit adult students. There is no centrally framed curriculum: each Folk High School draws up its own. Labour Market Training consists mainly of retraining courses, primarily designed for unemployed persons or others who need to change their occupations. Correspondence courses are very widespread in Sweden. Extensive courses for adults are also provided on radio and television.

The New Curriculum

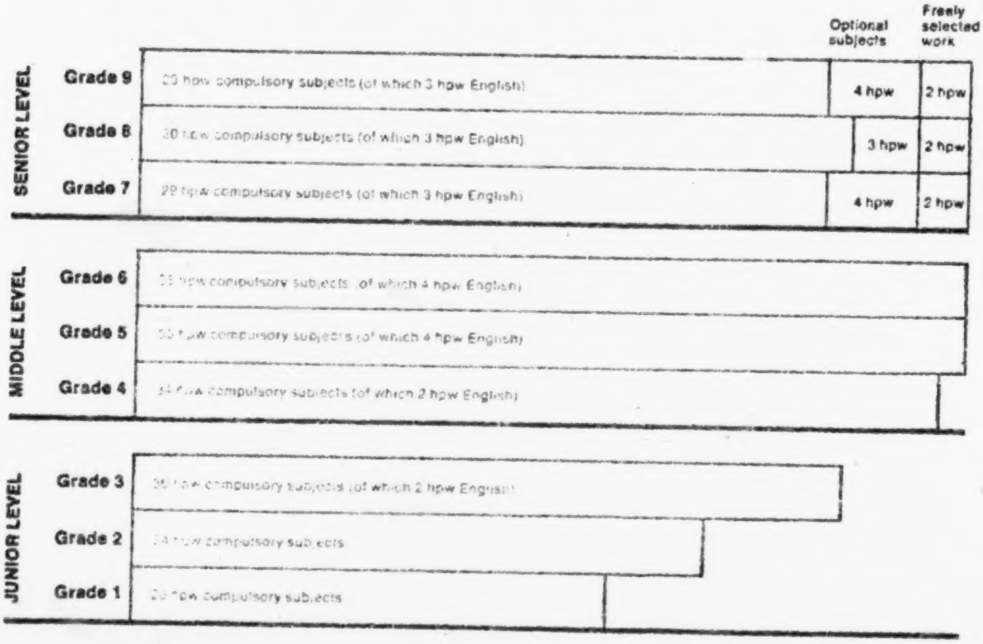
(From the information booklet The Comprehensive School in Sweden: The Nine-year Compulsory School, issued by the National Swedish Board of Education, 1970, p.3. Abridged.)

In the spring of 1962 the Swedish Riksdag resolved in favour of the introduction of a new comprehensive school throughout the country by 1972/73. The 1962 reform entailed a radical transformation of the entire school system in Sweden, replacing the seven-year elementary school, girls' school and junior secondary school with a single, compulsory nine-year comprehensive school.

The comprehensive school has now been given a new curriculum, known as Lgr 69 (an abbreviation of the Swedish for "comprehensive school curriculum") since its objectives and principles were resolved by the Riksdag in the spring 1969. Lgr 69 is to be successively introduced over a three-year period starting in the autumn term of 1970.

It would however be wrong to speak of a new school. Lgr 69 is in fact an amplification of the curriculum which has applied since 1962. Most of the innovations and alterations now being put into effect are the result of experimental activities at various schools all over Sweden during the last few years.

The structure of the 9-year compulsory school 1)


Optional subjects
Freely selected work
SENIOR LEVEL
Grade 9
29 hpw compulsory subjects (of which 3 hpw English)
4 hpw
2 hpw
Grade 8
30 hpw compulsory subjects (of which 3 hpw English)
3 hpw
2 hpw
Grade 7
29 hpw compulsory subjects (of which 3 hpw English)
4 hpw
2 hpw
MIDDLE LEVEL
Grade 6
35 hpw compulsory subjects (of which 4 hpw English)
Grade 5
35 hpw compulsory subjects (of which 4 hpw English)
Grade 4
34 hpw compulsory subjects (of which 2 hpw English)
JUNIOR LEVEL
Grade 3
30 hpw compulsory subjects (of which 2 hpw English)
Grade 2
24 hpw compulsory subjects
Grade 1
20 hpw compulsory subjects

hpw = hours per week

Grades 7—9 offer a choice between a general course and a more advanced course in Mathematics, French, English and German.

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1) From the information pamphlet of the National Swedish Board of Education on The Swedish 9 Year Comprehensive Compulsory School.